Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

☑ **Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For Quarterly Period Ended June 29, 2008

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from _____ to _____

Commission File Number 000-30361

Illumina, Inc.

(Exact name of registrant as specified in its charter)

Delaware	33-0804655
(State or other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
9885 Towne Centre Drive, San Diego, CA	92121
(Address of Principal Executive Offices)	(Zip Code)

(858) 202-4500
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☑	Accelerated filer ☐	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

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

As of July 15, 2008, there were 57,163,393 shares of the Registrant's Common Stock outstanding.

ILLUMINA, INC.

INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

Illumina, Inc.
Condensed Consolidated Balance Sheets
(In thousands)

	June 29, 2008 (Unaudited)	December 30, 2007 (1)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 132,968	$ 174,941
Short-term investments	170,307	211,141
Accounts receivable, net	101,985	83,119
Inventory, net	67,972	53,980
Deferred tax assets, current portion	23,778	26,934
Prepaid expenses and other current assets	9,646	12,640
Total current assets	506,656	562,755
Property and equipment, net	72,125	46,274
Long-term investments	52,825	—
Goodwill	228,734	228,734
Intangible assets, net	53,011	58,116
Deferred tax assets, long-term portion	67,209	80,245
Other assets, net	12,125	11,608
Total assets	$ 992,685	$ 987,732
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 86,048	$ 75,163
Litigation settlements payable	—	90,536
Current portion of long-term debt	400,000	16
Total current liabilities	486,048	165,715
Long-term debt, less current portion	—	400,000
Other long-term liabilities	14,885	10,339
Commitments and contingencies		
Stockholders' equity	491,752	411,678
Total liabilities and stockholders' equity	$ 992,685	$ 987,732

(1) The Condensed Consolidated Balance Sheet at December 30, 2007 has been derived from the audited financial statements as of that date.

See accompanying notes to the condensed consolidated financial statements.

Illumina, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Revenue:				
Product revenue	$ 128,552	$ 74,297	$ 239,235	$ 135,562
Service and other revenue	11,625	10,238	22,803	21,123
Total revenue	140,177	84,535	262,038	156,685
Costs and expenses:				
Cost of product revenue (including non-cash stock compensation expense of $1,337, $956, $2,642 and $1,839, respectively, excluding impairment of manufacturing equipment and amortization of intangible assets)	47,148	27,036	89,673	48,850
Cost of service and other revenue (including non-cash stock compensation expense of $80, $77, $179 and $140, respectively)	3,311	3,105	6,867	6,412
Research and development (including non-cash stock compensation expense of $3,448, $2,497, $6,754 and $4,428, respectively)	23,493	18,184	44,057	34,140
Selling, general and administrative (including non-cash stock compensation expense of $7,410, $4,255, $13,556 and $9,056, respectively)	35,616	23,297	69,443	46,930
Impairment of manufacturing equipment	4,069	—	4,069	—
Amortization of intangible assets	2,669	662	5,084	1,104
Acquired in-process research and development	—	—	—	303,400
Total costs and expenses	116,306	72,284	219,193	440,836
Income (loss) from operations	23,871	12,251	42,845	(284,151)
Interest and other income, net	830	2,343	4,410	5,066
Income (loss) before income taxes	24,701	14,594	47,255	(279,085)
Provision for income taxes	9,303	5,330	18,429	9,727
Net income (loss)	$ 15,398	$ 9,264	$ 28,826	$ (288,812)
Net income (loss) per basic share	$ 0.27	$ 0.17	$ 0.51	$ (5.39)
Net income (loss) per diluted share	$ 0.23	$ 0.16	$ 0.44	$ (5.39)
Shares used in calculating basic net income (loss) per share	56,787	53,778	56,310	53,604
Shares used in calculating diluted net income (loss) per share	66,698	58,061	65,231	53,604

See accompanying notes to the condensed consolidated financial statements.

Illumina, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In thousands)

	Six Months Ended	
	June 29, 2008	July 1, 2007
Operating activities:		
Net income (loss)	$ 28,826	$ (288,812)
Adjustments to reconcile net income (loss) to net cash (used in) provided by operating activities:		
Acquired in-process research and development	—	303,400
Amortization of increase in inventory valuation	—	942
Amortization of intangible assets	5,084	1,126
Amortization of debt issuance costs	679	501
Depreciation expense	7,730	5,438
Impairment of manufacturing equipment	4,069	—
Stock-based compensation expense	23,131	15,463
Amortization of gain on sale of land and building	(85)	(102)
Changes in operating assets and liabilities:		
Accounts receivable	(17,281)	(12,536)
Inventory	(13,371)	(14,869)
Deferred tax assets	16,201	—
Prepaid expenses and other current assets	4,127	(760)
Other assets	(1,142)	1,524
Accounts payable and accrued liabilities	3,516	20,260
Litigations settlements payable	(90,536)	—
Accrued income taxes	(1,964)	7,712
Other long-term liabilities	5,484	(161)
Net cash (used in) provided by operating activities	(25,532)	39,126
Investing activities:		
Cash obtained in acquisition, net of cash paid for transaction costs	—	72,532
Purchases of available-for-sale securities	(247,451)	(296,879)
Sales and maturities of available-for-sale securities	231,767	130,308
Purchases of property and equipment	(29,823)	(9,925)
Proceeds from sale of fixed assets	—	40
Net cash used in investing activities	(45,507)	(103,924)
Financing activities:		
Payments on long-term debt	(16)	(69)
Proceeds from issuance of convertible debt, net of issuance costs	—	390,296
Purchase of convertible note hedges	—	(139,040)
Proceeds from the exercise of warrants	2,184	92,440
Common stock repurchases	—	(251,622)
Proceeds from issuance of common stock	27,982	15,410
Net cash provided by financing activities	30,150	107,415
Effect of foreign currency translation on cash and cash equivalents	(1,084)	114
Net (decrease) increase in cash and cash equivalents	(41,973)	42,731
Cash and cash equivalents at beginning of period	174,941	38,386
Cash and cash equivalents at end of period	$ 132,968	$ 81,117

See accompanying notes to the condensed consolidated financial statements.

Illumina, Inc.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Summary of Significant Accounting Principles

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles for complete financial statements. The unaudited condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation. In management's opinion, the accompanying financial statements reflect all adjustments, consisting of normal recurring accruals, considered necessary for a fair presentation of the results for the interim periods presented.

Interim financial results are not necessarily indicative of results anticipated for the full year. These unaudited financial statements should be read in conjunction with the Company's 2007 audited financial statements and footnotes included in the Company's Annual Report on Form 10-K for the year ended December 30, 2007, as filed with the Securities and Exchange Commission (SEC) on February 26, 2008.

The preparation of financial statements requires that management make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Fiscal Year

The Company's fiscal year consists of 52 or 53 weeks ending the Sunday closest to December 31, with quarters of 13 or 14 weeks ending the Sunday closest to March 31, June 30, and September 30. The three and six months ended June 29, 2008 and July 1, 2007 were both 13 and 26 weeks, respectively.

Revenue Recognition

The Company's revenue is generated primarily from the sale of products and services. Product revenue consists of sales of arrays, reagents, flow cells, instrumentation, and oligonucleotides (oligos), which are short sequences of DNA. Service and other revenue consists of revenue received for performing genotyping and sequencing services, extended warranty sales and amounts earned under research agreements with government grants, which are recognized in the period during which the related costs are incurred.

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price to the buyer is fixed or determinable and collectibility is reasonably assured. In instances where final acceptance of the product or system is required, revenue is deferred until all the acceptance criteria have been met. All revenue is recorded net of any applicable allowances for returns or discounts.

Revenue for product sales is recognized generally upon shipment and transfer of title to the customer, provided no significant obligations remain and collection of the receivables is reasonably assured. Revenue from the sale of instrumentation is recognized when earned, which is generally upon shipment. Revenue for genotyping and sequencing services is recognized when earned, which is generally at the time the genotyping and sequencing analysis data is delivered to the customer.

In order to assess whether the price is fixed and determinable, the Company ensures there are no refund rights. If payment terms are based on future performance, the Company defers revenue recognition until the price becomes fixed and determinable. The Company assesses collectibility based on a number of factors, including past transaction history with the customer and the creditworthiness of the customer. If the Company determines that collection of a payment is not reasonably assured, revenue recognition is deferred until the time collection becomes reasonably assured, which is generally upon receipt of payment.

Sales of instrumentation generally include a standard one-year warranty. The Company also sells separately priced maintenance (extended warranty) contracts, which are generally for one or two years, upon the expiration of the initial warranty. Revenue for extended warranty sales is recognized ratably over the term of the extended warranty period. Reserves are provided for estimated product warranty expenses at the time the associated revenue is recognized. If the Company were to experience an increase in warranty claims or if costs of servicing its warrantied products were greater than its estimates, gross margins could be adversely affected.

While the majority of its sales agreements contain standard terms and conditions, the Company does enter into agreements that contain multiple elements or non-standard terms and conditions. Emerging Issues Task Force (EITF) No. 00-21, *Revenue Arrangements with Multiple Deliverables,* provides guidance on accounting for arrangements that involve the delivery or performance of multiple products, services, or rights to use assets within contractually binding arrangements. For arrangements with multiple elements, revenue recognition is based on the individual units of accounting determined to exist in the arrangement. A delivered item is considered a separate unit of accounting when the delivered item has value to the customer on a stand-alone basis, there is objective and reliable evidence of the fair value of the undelivered items and, if the delivered item carries a general right of return, delivery or performance of the undelivered items is considered probable and substantially in the Company's control. Items are considered to have stand-alone value when they are sold separately by any vendor or when the customer could resell the item on a stand-alone basis. The fair value of an item is generally the price charged for the product, if the item is regularly sold on a stand-alone basis. When objective and reliable evidence of fair value exists for all units of accounting in an arrangement, the arrangement consideration is generally allocated to each unit of accounting based upon its relative fair value. In those instances when objective and reliable evidence of fair value exists for the undelivered items but not for the delivered items, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of arrangement consideration allocated to the delivered items equals the total arrangement consideration less the aggregate fair value of the undelivered items. When the Company is unable to establish stand-alone value for delivered items or when fair value of undelivered items has not been established, revenue is deferred until all elements are delivered and services have been performed, or until fair value can objectively be determined for any remaining undelivered elements. The Company recognizes revenue for delivered elements only when it determines that the fair values of undelivered elements are known and there are no uncertainties regarding customer acceptance.

Impairment of Long-lived Assets

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* , if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the future discounted cash flows associated with the use of the asset and adjusts the value of the asset accordingly. Factors that would necessitate an impairment assessment include a significant decline in the Company's stock price and market capitalization compared to its net book value, significant changes in the ability of a particular asset to generate positive cash flows and significant changes in the Company's strategic business objectives and utilization of the asset.

Stock-Based Compensation

The Company uses the Black-Scholes-Merton option-pricing model to determine the fair value of stock-based awards under Statement of Financial Accounting Standards (SFAS) No. 123R, *Share-Based Payment*. This model incorporates various assumptions including volatility, expected life and interest rates. During the comparable period of the prior year, the Company used an expected stock-price volatility assumption that was primarily based on historical realized volatility of the stock during a period of time. For the current quarter, volatility was determined by equally weighing the historical and implied volatility of the Company's common stock. The historical volatility of the Company's common stock over the most recent period is generally commensurate with the estimated expected life of the Company's stock options, adjusted for the impact of unusual fluctuations not reasonably expected to recur and other relevant factors. The implied volatility is calculated from the implied market volatility of exchange-traded call options on the Company's common stock. The expected life of an award is based on historical experience and on the terms and conditions of the stock awards granted to employees.

The assumptions used for the specified reporting periods and the resulting estimates of weighted-average fair value per share of options granted and for stock purchases under the Employee Stock Purchase Plan (ESPP) during those periods are as follows:

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Interest rate — stock options	2.86 — 3.14%	4.61 — 4.68%	2.86 — 3.14%	4.61 — 4.75%
Interest rate — stock purchases	4.47 — 4.71%	4.83 — 4.86%	4.47 — 4.71%	4.83 — 4.86%
Volatility — stock options	52 — 54%	66 — 68%	52 — 56%	66 — 70%
Volatility — stock purchases	58 — 69%	75 — 76%	58 — 69%	75 — 76%
Expected life — stock options	6 years	6 years	6 years	6 years
Expected life — stock purchases	6 — 12 months	6 — 12 months	6 — 12 months	6 — 12 months
Expected dividend yield	0%	0%	0%	0%
Weighted average fair value per share of options granted	$ 40.54	$ 21.29	$ 35.90	$ 25.02
Weighted average fair value per share of employee stock purchases	$ 16.63	$ 11.84	$ 16.63	$ 11.84

As of June 29, 2008, approximately $147.3 million of total unrecognized compensation cost related to stock options, restricted stock and ESPP shares issued to date is expected to be recognized over a weighted-average period of approximately 1.5 years.

Net Income (Loss) per Share

Basic and diluted net income (loss) per common share is presented in conformity with SFAS No. 128, *Earnings per Share,* for all periods presented. In accordance with SFAS No. 128, basic net income (loss) per share is computed using the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. Diluted net income (loss) per share is computed using the weighted average number of common and dilutive common equivalent shares from the Company's Convertible Senior Notes, equity awards, warrants sold in connection with the Convertible Senior Notes, and warrants assumed in the acquisition of Solexa using the treasury stock method. The following table presents the calculation of weighted-average shares used to calculate basic and diluted net income (loss) per share (in thousands):

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Weighted-average shares outstanding	56,787	53,802	56,310	53,628
Less: Weighted-average shares of common stock subject to repurchase	—	(24)	—	(24)
Weighted-average shares used in calculating basic net income (loss) per share	56,787	53,778	56,310	53,604
Plus: Effect of dilutive Convertible Senior Notes	4,043	—	3,668	—
Plus: Effect of dilutive equity awards	2,895	3,505	2,802	—
Plus: Effect of dilutive warrants sold in connection with the Convertible Senior Notes	1,791	—	1,250	—
Plus: Effect of dilutive warrants assumed in the acquisition of Solexa	1,182	778	1,201	—
Weighted-average shares used in calculating diluted net income (loss) per share	66,698	58,061	65,231	53,604

Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) includes foreign currency translation adjustments and unrealized gains and losses on the Company's available-for-sale securities, including a temporary impairment charge of $3.1 million as of June 29, 2008 associated with the Company's auction rate securities. Refer to Note 4 for further discussion regarding this unrealized loss.

The components of other comprehensive income (loss) are as follows (in thousands):

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Net income (loss)	$ 15,398	$ 9,264	$ 28,826	$ (288,812)
Foreign currency translation adjustments	(219)	66	155	201
Unrealized (loss) gain on investments	(958)	97	(2,242)	(10,728)
Total other comprehensive income (loss)	$ 14,221	$ 9,427	$ 26,739	$ (299,339)

Reclassifications

Certain previously reported amounts have been reclassified to conform to the current period's presentation.

Recent Accounting Pronouncements

SFAS No. 141(R), *Business Combinations*, was issued in December of 2007. SFAS No. 141(R) establishes principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. SFAS No. 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and sets forth what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The guidance will become effective for fiscal years beginning after December 15, 2008. The Company is currently evaluating the impact, if any, the adoption of this pronouncement will have on the Company's consolidated financial statements.

In May 2008, the Financial Accounting Standards Board (FASB) issued FASB Staff Position (FSP) No. APB 14-1, *Accounting for Convertible Debt Instruments that May be Settled in Cash upon Conversion (Including Partial Cash Settlement)* (FSP APB 14-1 or the FSP) that significantly impacts the accounting for convertible debt. The FSP requires cash settled convertible debt, such as the Company's $400.0 million aggregate principal amount of convertible notes that are currently outstanding, to be bifurcated into debt and equity components and accounted for separately at issuance. The value assigned to the debt component would be the estimated fair value, as of the issuance date, of a similar bond without the conversion feature. The difference between the bond cash proceeds and this estimated fair value would be recorded as a debt discount and amortized to interest expense over the life of the bond, resulting in the recognition of interest expense on these securities at an effective rate more comparable to what the Company would have incurred had the Company issued nonconvertible debt with otherwise similar terms. The equity component of the convertible debt securities would be included in the paid-in-capital section of stockholders' equity on the Company's consolidated balance sheets, and the initial carrying values of these debt securities would be correspondingly reduced. Although FSP APB 14-1 has no impact on the Company's actual past or future cash flows, it requires the Company to record a significant amount of non-cash interest expense as the debt discount is amortized which would result in a material adverse impact on the results of operations and on earnings per share. The Company is currently evaluating the impact this FSP will have on its results of operations upon adoption. In addition, if the Company's convertible debt is redeemed or converted prior to maturity, any unamortized debt discount at the time of such redemption or conversion would result in a loss on extinguishment. FSP APB 14-1 will become effective for fiscal years beginning after December 15, 2008, and require retrospective application.

2. Acquisition of Solexa, Inc.

On January 26, 2007, the Company completed its acquisition of Solexa, Inc. (Solexa), a Delaware corporation, in a stock-for-stock merger transaction. The Company issued approximately 13.1 million shares of its common stock as consideration for this merger.

The purchase price of the acquisition is as follows (in thousands):

Fair market value of securities issued	$527,067
Fair market value of change of control bonuses and related taxes	8,182
Transaction costs not included in Solexa net tangible assets acquired	8,138
Fair market value of vested stock options, warrants and restricted stock assumed	75,334
Total purchase price	$618,721

Based on the estimated fair values at the acquisition date, the Company allocated $303.4 million to in-process research and development (IPR&D), $62.2 million to tangible assets acquired and liabilities assumed and $24.4 million to intangible assets. The remaining excess of the purchase price over the fair value of net assets acquired of $228.7 million was allocated to goodwill.

The results of Solexa's operations have been included in the Company's consolidated financial statements since the acquisition date of January 26, 2007. The following unaudited pro forma information shows the results of the Company's operations for the specified reporting periods as though the acquisition had occurred as of the beginning of that period (in thousands, except per share data):

	Six Months Ended July 1, 2007
Revenue	$ 156,740
Net income	$ 6,935
Basic net income per share	$ 0.13
Diluted net income per share	$ 0.12

The pro forma results have been prepared for comparative purposes only and are not necessarily indicative of the actual results of operations had the acquisition taken place as of the beginning of the period presented, or the results that may occur in the future. The pro forma results exclude the $303.4 million non-cash acquired IPR&D charge recorded upon the closing of the acquisition during the first quarter of 2007.

3. Segment Information

During the first quarter of 2008, the Company reorganized its operating structure into a newly created Life Sciences Business Unit, which includes all products and services related to the research market, namely the BeadArray, BeadXpress and Sequencing product lines. The Company also created a Diagnostics Business Unit to focus on the emerging opportunity in molecular diagnostics. For the three and six months ended June 29, 2008, the Company had limited activity related to the Diagnostics Business Unit and operating results were reported on an aggregate basis to the chief operating decision maker of the Company, the chief executive officer. In accordance with SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information* , the Company operated in one segment for the three and six months ended June 29, 2008.

4. Cash and Cash Equivalents and Investments

Cash and cash equivalents are comprised of short-term, highly liquid investments with maturities of 90 days or less from the date of purchase. Investments are comprised of available-for-sale securities recorded at estimated fair value. Unrealized gains and losses associated with the Company's investments, if any, are reported in stockholders' equity in accordance with SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*.

As of June 29, 2008, the Company's excess cash balances were primarily invested in marketable debt securities, including treasury bills and commercial paper with strong credit ratings, corporate bonds and short maturity mutual funds providing similar financial returns. Additionally, the Company had $55.9 million in auction rate securities issued primarily by municipalities and universities. During the six months ended June 29, 2008, the Company recorded an unrealized loss of $3.1 million due to the failure associated with the auctions of each of these securities, which may cause the Company's ability to liquidate its investment and fully recover the carrying value in the near term to be limited or not exist. The Company has determined this reduction in fair value to be temporary. This unrealized loss reduced the fair value of the Company's auction rate securities to $52.8 million. These securities are classified as long-term investments, and the unrealized loss is included as a component of other comprehensive income within stockholders' equity in the Company's consolidated balance sheet.

The municipal auction rate securities held by the Company are rated by the following agencies: Fitch, Moody's and Standard & Poor's. All of the securities held by the Company are currently rated AAA, the highest rating. Although their credit ratings did not deteriorate, there was insufficient demand at auction for all of the high-grade auction rate securities held by the Company during the first quarter of 2008, causing them to be illiquid. During the second quarter of 2008, the credit market did not recover and the auction rate securities remained illiquid. In the event the Company needs to access the funds that are in an illiquid state, it may not be able to do so without a loss of principal until a future auction on these investments is successful, the securities are redeemed by the issuer or they mature. As a result, the Company has recorded an unrealized loss during the six months ended June 29, 2008. This unrealized loss was determined in accordance with SFAS No. 157, *Fair Value Measurements*, which was adopted by the Company on January 1, 2008.

As a basis for considering market participant assumptions in fair value measurements, SFAS No. 157 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). Due to the lack of actively traded market data, the value of these securities and resulting unrealized loss was determined using Level 3 hierarchical inputs. These inputs include management's assumptions of pricing by market participants, including assumptions about risk. In accordance with SFAS No. 157, the Company used the concepts of fair value based on estimated discounted future cash flows of interest income over a projected five-year period reflective of the length of time the Company

anticipates it will take the securities to become liquid. A discount rate of approximately 5% was utilized when preparing this model. The classification of these securities as long-term assets was deemed appropriate as the Company believes it may not be able to liquidate its investments without significant loss within the next year. Potentially, it could take until the final maturity of the underlying notes (ranging from 23 years to 39 years) to realize these investments' recorded value. The Company currently believes these securities are not permanently impaired, primarily due to the government guarantee of the underlying securities and the Company's ability to hold these securities for the foreseeable future. The Company's cash, cash equivalents and short-term investments total $303.3 million as of June 29, 2008. Based on the liquidity of these funds and the Company's projected cash flows from operations, the Company believes that the illiquidity on the auction rate security investments will not materially affect its ability to execute its current business plan.

5. Inventories

Inventories are stated at the lower of standard cost (which approximates actual cost) or market. Inventory includes raw materials and finished goods that may be used in the research and development process and such items are expensed as consumed or expired. Provisions for slow moving, excess and obsolete inventories are provided based on product life cycle and development plans, product expiration and quality issues, historical experience and inventory levels. The components of net inventories are as follows (in thousands):

	June 29, 2008	December 30, 2007
Raw materials	$ 31,008	$ 27,098
Work in process	29,742	20,321
Finished goods	7,222	6,561
Total inventory, net	$ 67,972	$ 53,980

6. Impairment of Manufacturing Equipment

During fiscal 2008, the Company implemented next-generation imaging and decoding systems to be used in manufacturing. These systems were developed to increase existing capacity and allow the Company to transition to the Infinium High-Density (HD) product line. As a result of this transition, the demand for products manufactured on the previous infrastructure was reduced and certain systems were no longer being utilized. In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* , a non-cash impairment charge of $4.1 million was recorded in the second quarter of fiscal 2008 for the excess machinery. This charge is included as a separate line item in the Company's consolidated statement of operations. There was no change to useful lives and related depreciation expense of the remaining assets, as the Company believes these estimates are currently reflective of the period the assets will be used in operations.

7. Goodwill and Intangible Assets

The Company accounts for goodwill and intangible assets under SFAS No. 142, *Goodwill and Other Intangible Assets*. As such, goodwill and other indefinite-lived intangible assets are not amortized, but are subject to annual impairment reviews, or more frequent reviews if events or circumstances indicate there may be impairment. The Company performed its annual impairment test of goodwill as of May 30, 2008, noting no impairment, and has determined there has been no impairment of goodwill through June 29, 2008.

The Company's intangible assets are comprised primarily of acquired core technology and customer relationships from the acquisition of Solexa and licensed technology from the Affymetrix settlement entered into on January 9, 2008. As a result of this settlement, the Company agreed, without admitting liability, to make a one-time payment to Affymetrix of $90.0 million. In return, Affymetrix agreed to dismiss with prejudice all lawsuits it had brought against the Company, and the Company agreed to dismiss with prejudice its counterclaims in the relevant lawsuits. Affymetrix also agreed not to sue the Company or its affiliates or customers for making, using or selling any of the Company's current products, evolutions of those products or services related to those products. In addition, Affymetrix agreed that, for four years, it will not sue the Company for making, using or selling the Company's products or services that are based on future technology developments. The covenant not to sue covers all fields other than photolithography, the process by which Affymetrix manufactures its arrays and a field in which the Company does not operate.

Of the total $90.0 million payment made on January 25, 2008, $36.0 million was recorded as licensed technology and classified as an intangible asset. The remaining $54.0 million was charged to expense during the fourth quarter of 2007. This allocation was determined in accordance with SFAS No. 5, *Accounting for Contingencies*, and EITF 00-21 using the concepts of fair value based on the past and estimated future revenue streams related to the products covered by the patents previously under dispute. The value of the licensed technology is the benefit derived, calculated using estimated discounted cash flows and future revenue projections, from the perpetual covenant not to sue for damages related to the sale of the Company's current products. The Company utilized a discount rate of 9.25% when preparing this model. The effective life of the licensed technology extends through 2015, the final expiry date of all patents considered in valuing the intangible asset. The related amortization is based on the higher of the percentage of usage or the straight-line method. The percentage of usage was determined using actual and projected revenues generated from products covered by the patents previously under dispute. For the current quarter, the percentage of usage was higher than the straight-line method, resulting in an expense of $2.0 million and $3.8 million for the three and six months ended June 29, 2008, respectively.

Acquired core technology and customer relationships are being amortized on a straight-line basis over their effective useful lives of 10 and three years, respectively. The amortization of the Company's intangible assets is excluded from cost of product revenue and is separately classified as amortization of intangible assets on the Company's consolidated statements of operations.

The following is a summary of the Company's amortizable intangible assets as of the respective balance sheet dates (in thousands):

	June 29, 2008			December 30, 2007		
	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net
Licensed technology	$ 36,000	$ (3,759)	$ 32,241	$ 36,000	$ —	$ 36,000
Core technology	23,500	(3,329)	20,171	23,500	(2,154)	21,346
Customer relationships	900	(425)	475	900	(275)	625
License agreements	1,029	(905)	124	1,029	(884)	145
Total intangible assets, net	$ 61,429	$ (8,418)	$ 53,011	$ 61,429	$ (3,313)	$ 58,116

8. Warranties

The Company generally provides a one-year warranty on genotyping, gene expression systems and sequencing systems. At the time revenue is recognized, the Company establishes an accrual for estimated warranty expenses associated with system sales. This expense is recorded as a component of cost of product revenue. Estimated warranty expenses associated with extended maintenance contracts are recorded as a cost of revenue ratably over the term of the maintenance contract.

Changes in the Company's warranty liability during the specified reporting period are as follows (in thousands):

Balance at December 30, 2007	$ 3,716
Additions charged to cost of revenue	4,905
Repairs and replacements	(3,526)
Balance at June 29, 2008	$ 5,095

9. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consist of the following (in thousands):

	June 29, 2008	December 30, 2007
Accounts payable	$ 35,350	$ 24,311
Compensation	20,709	17,410
Short-term deferred revenue	6,283	7,541
Reserve for product warranties	5,095	3,716
Taxes	4,591	8,298
Customer deposits	3,346	5,266
Accrued royalties	3,161	1,867
Legal and other professional fees	2,394	4,276
Short-term deferred rent	932	1,251
Other	4,187	1,227
Total accounts payable and accrued liabilities	$ 86,048	$ 75,163

10. Stockholders' Equity

Stock Options

In June 2005, the stockholders of the Company approved the 2005 Stock and Incentive Plan (the 2005 Stock Plan). Upon adoption of the 2005 Stock Plan, issuance of options under the Company's existing 2000 Stock Plan ceased. Additionally, in connection with the acquisition of Solexa, the Company assumed stock options granted under the 2005 Solexa Equity Incentive Plan (the 2005 Solexa Equity Plan). The 2005 Stock Plan and the 2005 Solexa Equity Plan initially provided that an aggregate of up to 12,285,619 shares of the Company's common stock be reserved and available to be issued. The 2005 Stock Plan provides for an automatic annual increase in the shares reserved for issuance by the lesser of 5% of the outstanding shares of the Company's common stock on the last day of the immediately preceding fiscal year, 1,200,000 shares or such lesser amount as determined by the Company's board of directors. Additionally, during the Company's Annual Meeting of Stockholders held on May 16, 2008, the stockholders ratified an amendment to increase the maximum number of shares of common stock authorized for issuance under the 2005 Stock Plan by 1,200,000 shares. As of June 29, 2008, options to purchase 3,730,108 shares remained available for future grant under the 2005 Stock Plan and 2005 Solexa Equity Plan.

On January 29, 2008, the Company's board of directors approved the New Hire Stock and Incentive Plan, which provides for the issuance of options and shares of restricted stock to newly hired employees. There is no set number of shares reserved for issuance under this Plan.

The Company's stock option activity under all stock option plans during the six months ended June 29, 2008 is as follows:

	Options	Weighted-Average Exercise Price
Outstanding at December 30, 2007	10,423,934	$ 24.26
Granted	1,244,550	$ 67.56
Exercised	(1,542,135)	$ 16.55
Cancelled	(463,572)	$ 36.59
Outstanding at June 29, 2008	9,662,777	$ 30.45

The following is a further breakdown of the options outstanding as of June 29, 2008:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price of Options Exercisable
$0.03-7.18	1,058,855	4.35	$ 5.10	676,171	$ 4.65
$7.41-8.60	1,021,373	5.59	$ 8.31	538,287	$ 8.19
$8.70-17.35	1,174,397	6.41	$ 12.42	633,298	$ 12.08
$17.73-26.34	1,051,383	6.90	$ 21.98	383,455	$ 21.85
$26.60-33.99	1,007,475	8.32	$ 30.27	280,153	$ 29.33
$34.07-39.22	1,114,295	8.16	$ 37.29	313,692	$ 36.86
$39.42-40.08	1,176,368	7.77	$ 40.07	289,738	$ 40.07
$40.23-64.97	1,312,731	9.23	$ 54.46	54,102	$ 55.40
$65.16-78.28	689,900	9.70	$ 68.56	9,375	$ 67.59
$82.74-82.74	56,000	9.98	$ 82.74	—	$ —
$0.03-82.74	9,662,777	7.36	$ 30.45	3,178,271	$ 18.44

The weighted average remaining life in years of options exercisable is 6.51 years as of June 29, 2008.

The aggregate intrinsic value of options outstanding and options exercisable as of June 29, 2008 was $544.4 million and $217.2 million, respectively. Aggregate intrinsic value represents the difference between the Company's closing stock price on the last trading day of the fiscal period, which was $86.79 on June 27, 2008, and the exercise price multiplied by the number of options outstanding. Total intrinsic value of options exercised was $46.2 million and $20.4 million for the six months ended June 29, 2008 and July 1, 2007, respectively.

Employee Stock Purchase Plan

In February 2000, the board of directors and stockholders adopted the 2000 ESPP. A total of 7,733,713 shares of the Company's common stock have been reserved for issuance under the ESPP. The ESPP permits eligible employees to purchase common stock at a discount, but only through payroll deductions, during defined offering periods.

The price at which stock is purchased under the ESPP is equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. The initial offering period commenced in July 2000. In addition, beginning with fiscal 2001, the ESPP provides for annual increases of shares available for issuance by the lesser of 3% of the number of outstanding shares of the Company's common stock on the last day of the immediately preceding fiscal year, 1,500,000 shares or such lesser amount as determined by the Company's board of directors. Shares totaling 69,664 were issued under the ESPP during the six months ended June 29, 2008. As of June 29, 2008, there were 5,465,516 shares available for issuance under the ESPP.

Restricted Stock Units

In 2007 the Company began granting restricted stock units pursuant to its 2005 Stock Plan as part of its regular annual employee equity compensation review program. Restricted stock units are share awards that, upon vesting, will deliver to the holder shares of the Company's common stock. Restricted stock units granted during 2007 vest over four years as follows: 15% vest on the first and second anniversaries of the grant date, 30% vest on the third anniversary of the grant date and 40% vest on the fourth anniversary of the grant date. Effective January 2008, the Company changed the vesting schedule for grants of new restricted stock units. Currently, restricted stock units vest 15% on the first anniversary of the grant date, 20% on the second anniversary of the grant date, 30% on the third anniversary of the grant date and 35% on the fourth anniversary of the grant date.

A summary of the Company's restricted stock unit activity and related information for the six months ended June 29, 2008 is as follows:

	Restricted Stock Units (1)
Outstanding at December 30, 2007	197,250
Awarded	219,770
Vested	—
Cancelled	(9,110)
Outstanding at June 29, 2008	407,910

(1) Each stock unit represents the fair market value of one share of common stock.

The weighted average grant-date fair value per share for the restricted stock units was $72.16 for the six months ended June 29, 2008.

Based on the closing price of the Company's common stock of $86.79 on June 27, 2008, the total pretax intrinsic value of all outstanding restricted stock units on that date was $35.4 million.

No restricted stock units were outstanding as of July 1, 2007.

Warrants

In conjunction with its acquisition of Solexa, the Company assumed 2,244,843 warrants issued by Solexa prior to the acquisition. During the six months ended June 29, 2008, there were 131,645 warrants exercised, resulting in cash proceeds to the Company of approximately $2.2 million.

A summary of all warrants outstanding as of June 29, 2008 is as follows:

Number of Shares	Exercise Price	Expiration Date
31,989	$ 57.62	9/24/2008
119,255	$ 14.54	4/25/2010
432,020	$ 14.54	7/12/2010
404,623	$ 21.81	11/23/2010
599,914	$ 21.81	1/19/2011
9,161,160 (1)	$ 62.87	2/15/2014
10,748,961		

(1) Represents warrants sold in connection with the offering of the Company's Convertible Senior Notes (See Note 11).

Treasury Stock

In connection with its issuance of $400.0 million principal amount of 0.625% Convertible Senior Notes due 2014 on February 16, 2007, the Company repurchased 5.8 million shares of its outstanding common stock for approximately $201.6 million in privately negotiated transactions concurrently with the offering. Additionally, during 2007, the Company repurchased approximately 1.6 million shares of its common stock under a Rule 10b5-1 trading plan for approximately $50.0 million. This plan expired during 2007.

11. Convertible Senior Notes

On February 16, 2007, the Company issued $400.0 million principal amount of 0.625% Convertible Senior Notes due 2014 (the Notes), which included the exercise of the initial purchasers' option to purchase up to an additional $50.0 million aggregate principal amount of Notes. The net proceeds from the offering, after deducting the initial purchasers' discount and offering expenses, were approximately $390.3 million. The Company will pay 0.625% interest per annum on the principal amount of the Notes, payable semi-annually in arrears in cash on February 15 and August 15 of each year. The Company made an interest payment of approximately $1.3 million on February 15, 2008. The Notes mature on February 15, 2014.

The Notes will be convertible into cash and, if applicable, shares of the Company's common stock, $0.01 par value per share, based on an initial conversion rate, subject to adjustment, of 22.9029 shares per $1,000 principal amount of Notes (which represents an initial conversion price of approximately $43.66 per share), only in the following circumstances and to the following extent: (1) during the five business-day period after any five consecutive trading period (the measurement period) in which the trading price per Note for each day of such measurement period was less than 97% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such day; (2) during any calendar quarter after the calendar quarter ending April 1, 2007, if the last reported sale price of the Company's common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeds 130% of the applicable conversion price in effect on the last trading day of the immediately preceding calendar quarter; (3) upon the occurrence of specified events; and (4) the Notes will be convertible at any time on or after November 15, 2013 through the third scheduled trading day immediately preceding the maturity date. The requirements of the second condition were satisfied in the first quarter of 2008, and the Notes accordingly became convertible from April 1, 2008 through, and including, June 30, 2008. The Company has determined that the requirements of this same condition have again been satisfied in the second quarter of 2008, and, accordingly, the Notes will continue to be convertible through, and including, September 30, 2008. Generally upon conversion of a Note, the Company will pay the conversion value of the Note in cash, up to the principal amount of the Note. Any excess of the conversion value over the principal amount is payable in shares of the Company's common stock. As of June 29, 2008, the principal amount of these Notes was classified as current liabilities. If, during the third quarter, none of the conditions to convertibility are satisfied, then the Company will reclassify the principal amount of these Notes to long-term debt.

In connection with the offering of the Notes in February 2007, the Company entered into convertible note hedge transactions (the hedge) with the initial purchasers and/or their affiliates (the counterparties) entitling the Company to purchase up to 11,451,480 shares of the Company's common stock at an initial strike price of $43.66 per share, subject to adjustment. In addition, the Company sold to these counterparties warrants (the warrants) to acquire 9,161,160 shares of the Company's common stock at an initial strike price of $62.87 per share, subject to adjustment, with the maximum number of shares issuable under these warrants to be capped at 18,322,320 should the convertible note hedge transaction be unwound. The cost of the hedge that was not covered by the proceeds from the sale of

the warrants was approximately $46.6 million and was reflected as a reduction of additional paid-in capital. The hedge is expected to reduce the potential equity dilution upon conversion of the Notes if the daily volume-weighted average price per share of the Company's common stock exceeds the strike price of the hedge. The warrants could have a dilutive effect on the Company's earnings per share to the extent that the price of the Company's common stock exceeds the strike price of the warrants on the exercise dates of the warrants, which occur during 2014, and the counterparties exercise them.

12. Legal Proceedings

In the recent past, the Company incurred substantial costs in defending against patent infringement claims and expects, going forward, to devote substantial financial and managerial resources to protect the Company's intellectual property and to defend against any future claims asserted against the Company.

Applied Biosystems Litigation

On December 26, 2006, Applied Biosystems Inc. (Applied Biosystems), formerly known as Applera Corporation, filed suit in California Superior Court, Santa Clara County against Solexa (which was acquired by the Company on January 26, 2007). This State Court action was related to the ownership of several patents assigned in 1995 to Solexa's predecessor company (Lynx Therapeutics) by a former employee (Dr. Stephen Macevicz), who is the inventor of these patents and is named as a co-defendant in the suit. Lynx was originally a unit of Applied Biosystems but was spun out in 1992. On May 31, 2007, Applied Biosystems filed a second suit, this time against the Company, in the U.S. District Court for the Northern District of California. This second suit sought a declaratory judgment of non-infringement of the Macevicz patents that are the subject of the State Court action mentioned above. Both suits were later consolidated in the U.S. District Court for the Northern District of California, San Francisco Division. By these consolidated actions, Applied Biosystems is seeking ownership of the Macevicz patents, unspecified costs and damages, and a declaration of non-infringement and invalidity of these patents. Applied Biosystems is not asserting any claim for patent infringement against the Company.

The Macevicz patents relate to methods for sequencing DNA using successive rounds of oligonucleotide probe ligation (sequencing-by-ligation). The Company's Genome Analyzer products use a different technology called Sequencing-by-Synthesis (SBS), which the Company believes is not covered by any of these patents. In addition, the Company has no plans to use any of the Sequencing-by-Ligation technologies covered by these patents.

13. Employee Benefit Plans

Retirement Plan

The Company has a 401(k) savings plan covering substantially all of its employees. Company contributions to the plan are discretionary. During the six months ended June 29, 2008 and July 1, 2007, the Company made matching contributions of $1.2 million and $0.5 million, respectively.

Executive Deferred Compensation Plan

For the Company's executives and members of the board of directors, the Company adopted the Illumina, Inc. Deferred Compensation Plan (the Plan) that became effective January 1, 2008. Eligible participants can contribute up to 80% of their base salary and 100% of all other forms of compensation into the Plan, including bonus, commission and director fees. The Company has agreed to credit the participants' contributions with earnings that reflect the performance of certain independent investment funds. On a discretionary basis, the Company may also make employer contributions to participant accounts in any amount determined by the Company. The vesting schedules of employer contributions are at the sole discretion of the Compensation Committee. However, all employer contributions shall become 100% vested upon the occurrence of the participant's disability, death, or retirement, or a change in control of the Company. The benefits under this plan are unsecured. Participants are generally eligible to receive payment of their vested benefit at the end of their elected deferral period or after termination of their employment with the Company for any reason or at a later date to comply with the restrictions of Section 409A. As of June 29, 2008, no employer contributions were made to the Plan.

In January 2008, the Company also established a rabbi trust for the benefit of its directors and officers under the Plan. In accordance with FASB Interpretation (FIN) No. 46, *Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51*, and EITF 97-14, *Accounting for Deferred Compensation Arrangements Where Amounts Earned Are Held in a Rabbi Trust and Invested*, the Company has included the assets of the rabbi trust in its consolidated balance sheet since the trust's inception. As of June 29, 2008, the assets of the trust and liabilities of the Company were $1.2 million and $1.1 million, respectively. The assets and liabilities are classified as other assets and accrued liabilities, respectively, on the Company's balance sheet as of June 29, 2008. Changes in the values of the assets held by the rabbi trust accrue to the Company.

14. Subsequent Events

Acquisition of Avantome, Inc. (Avantome)

On July 22 2008, the Company announced its acquisition of Avantome, a development stage company. The primary purpose of the acquisition was to obtain Avantome's low-cost, long-read, sequencing technology. As consideration for the acquisition, the Company paid $25.0 million in cash up front and may pay up to an additional $35.0 million in contingent cash consideration based on the achievement of certain milestones. The Company will assess the contingent consideration payable in accordance with the provisions of SFAS No. 141, *Business Combinations*, and EITF 95-8, *Accounting for Contingent Consideration Paid to the Shareholders of an Acquired Enterprise in a Purchase Business Combination.* The Company plans to record these payments as additional purchase consideration based upon the economic form of the transaction. Any adjustment to the purchase price allocation will be made when the amount of actual contingent consideration is determinable beyond a reasonable doubt.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

This discussion and analysis should be read in conjunction with our financial statements and accompanying notes included in this Quarterly Report on Form 10-Q and the financial statements and notes thereto for the year ended December 30, 2007 included in our Annual Report on Form 10-K. Operating results are not necessarily indicative of results that may occur in future periods.

The discussion and analysis in this Quarterly Report on Form 10-Q contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. Words such as "anticipate," "believe," "continue," "estimate," "expect," intend," "may," "plan," "potential," "predict," "project," or similar words or phrases, or the negatives of these words, may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. Examples of forward-looking statements include, among others, the integration of Solexa, Inc.'s technology with our existing technology, the commercial launch of new products, including products based on our Solexa, Inc. (Solexa) and our VeraCode technologies, and the duration which our existing cash and other resources is expected to fund our operating activities.

Forward-looking statements are subject to known and unknown risks and uncertainties and are based on potentially inaccurate assumptions that could cause actual results to differ materially from those expected or implied by the forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed in the subsection entitled "Item 1A. Risk Factors." below as well as those discussed elsewhere. Accordingly, you should not unduly rely on these forward-looking statements, which speak only as of the date of this Quarterly Report. We undertake no obligation to publicly revise these forward-looking statements to reflect circumstances or events after the date of this Quarterly Report or to reflect the occurrence of unanticipated events. You should, however, review the factors and risks we describe in the reports we file from time to time with the Securities and Exchange Commission (SEC).

Overview

We are a leading developer, manufacturer and marketer of 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. In the future, 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.

Our Technologies

BeadArray Technology

We have developed a proprietary array technology that enables the large-scale analysis of genetic variation and biological function. Our BeadArray technology combines microscopic beads and a substrate in a simple proprietary manufacturing process to produce arrays that can perform many assays simultaneously. Our BeadArray technology provides a unique combination of high throughput, cost effectiveness, and flexibility. We believe that these features have enabled our BeadArray technology to become a leading platform for the emerging high-growth market of single-nucleotide polymorphism (SNP) genotyping and expect they will enable us to become a key player in the gene expression market.

Sequencing Technology

Our DNA sequencing technology, acquired as part of the Solexa merger that was completed on January 26, 2007, is based on the use of our proprietary sequencing-by-synthesis (SBS) biochemistry. Our technology is capable of generating several billion bases of DNA sequence from a single experiment with a single sample preparation, dramatically reducing the cost and improving the practicality, of human resequencing compared to conventional technologies.

VeraCode Technology

The VeraCode technology, acquired as part of the acquisition of CyVera Corporation in April 2005, enables cost-effective, high-throughput analysis of DNA, RNA and proteins at mid- to low- multiplex range. Multiplexing refers to the number of individual pieces of information that are simultaneously extracted from one sample. In addition to Life Science research applications, we believe the molecular diagnostics market will require systems that are extremely high throughput and cost effective in this mid- to low-multiplex range. We began shipping the BeadXpress System, which uses the VeraCode technology, for Life Science research applications during the first quarter of 2007, along with several assays for the system. In the research market, we expect our customers to utilize our BeadArray technology for their higher multiplex projects and then move to our BeadXpress system for their lower multiplex projects utilizing the same assays.

Product Developments

Consumables

During the six months ended June 29, 2008, we introduced two new products for DNA analysis: the Infinium High-Density (HD) Human1M-Duo (two samples per chip) and the Human610-Quad (four samples per chip), featuring up to 2.3 million SNPs per BeadChip. The new Infinium HD product line doubles sample throughput compared to prior generations of the product and reduces DNA input requirements by as much as seventy percent. First customer shipments of the Human610-Quad occurred in the first quarter of 2008. The Human1M-Duo BeadChips began shipment in the second quarter of 2008.

Additionally, in April 2008, we introduced a new product for RNA analysis: the HumanHT—12 Gene Expression BeadChip which enables researchers to perform whole genome gene expression on twelve samples in parallel. Shipment of this product began during the second quarter of 2008.

Instruments

During the first quarter of 2008, we launched the next-generation Genome Analyzer, the Genome Analyzer II (GAII) DNA Sequencing platform. We believe the GAII significantly improves the overall robustness and throughput of the Genome Analyzer and enables researchers to achieve industry leading accuracy and daily throughput at the lowest operating cost. Shipments began during the first quarter of 2008.

In April 2008, we launched the iScan System, a next-generation BeadChip scanner that, we believe, provides researchers conducting genotyping and gene expression studies with significantly greater throughput, enhanced automation, and improved ease of use. When used with the Human1M-Duo or the Human610-Quad and our Laboratory Information Management Systems (LIMS) and automation options, the iScan System can complete genotyping studies up to six times faster than studies run on our BeadStation. Under an Early Access Program, we began shipping the iScan System in the first quarter of 2008 to customers in both the academic and industrial sectors. However, broad commercial shipment of the iScan System did not commence until the second quarter of 2008.

Critical Accounting Policies and Estimates

General

Our discussion and analysis of our financial condition and results of operations is based upon our condensed unaudited consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of financial statements requires that management make estimates, assumptions and judgments with respect to the application of accounting policies that affect the reported amounts of assets, liabilities, revenue and expenses, and the disclosures of contingent assets and liabilities. Actual results could differ from those estimates. Our significant accounting policies are described in Note 1 to our unaudited condensed consolidated financial statements. Certain accounting policies are deemed critical if 1) they require an accounting estimate to be made based on assumptions that were highly uncertain at the time the estimate was made, and 2) changes in the estimate that are reasonably likely to occur, or different estimates that we reasonably could have used would have a material effect on our unaudited condensed consolidated financial statements.

Management has discussed the development and selection of these critical accounting policies with the Audit Committee of our Board of Directors, and the Audit Committee has reviewed the disclosure. In addition, there are other items within our financial statements that require estimation, but are not deemed critical as defined above. We believe the following critical accounting policies reflect our more significant estimates and assumptions used in the preparation of the unaudited condensed consolidated financial statements.

Revenue Recognition

Our revenue is generated primarily from the sale of products and services. Product revenue consists of sales of arrays, reagents, flow cells, instrumentation and oligonucleotides (oligos). Service and other revenue consists of revenue received for performing genotyping and sequencing services, extended warranty sales and amounts earned under research agreements with government grants, which are recognized in the period during which the related costs are incurred.

We recognize revenue in accordance with the guidelines established by SEC Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition*. Under SAB No. 104, revenue cannot be recorded until all of the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured. All revenue is recorded net of any applicable allowances for returns or discounts.

Revenue for product sales is recognized generally upon shipment and transfer of title to the customer, provided no significant obligations remain and collection of the receivables is reasonably assured. Revenue from the sale of instrumentation is recognized when earned, which is generally upon shipment. Revenue for genotyping and sequencing services is recognized when earned, which is generally at the time the genotyping and sequencing analysis data is delivered to the customer.

In order to assess whether the price is fixed and determinable, we ensure there are no refund rights. If payment terms are based on future performance or a right of return exists, we defer revenue recognition until the price becomes fixed and determinable. We assess collectibility based on a number of factors, including past transaction history with the customer and the creditworthiness of the customer. If we determine that collection of a payment is not reasonably assured, revenue recognition is deferred until the time collection becomes reasonably assured, which is generally upon receipt of payment. Changes in judgments and estimates regarding application of SAB No. 104 might result in a change in the timing or amount of revenue recognized.

Sales of instrumentation generally include a standard one-year warranty. We also sell separately priced maintenance (extended warranty) contracts, which are generally for one or two years, upon the expiration of the initial warranty. Revenue for extended warranty sales is recognized ratably over the term of the extended warranty period. Reserves are provided for estimated product warranty expenses at the time the associated revenue is recognized. If we were to experience an increase in warranty claims or if costs of servicing our warrantied products were greater than our estimates, gross margins could be adversely affected.

While the majority of our sales agreements contain standard terms and conditions, we do enter into agreements that contain multiple elements or non-standard terms and conditions. Emerging Issues Task Force (EITF) No. 00-21, *Revenue Arrangements with Multiple Deliverables,* provides guidance on accounting for arrangements that involve the delivery or performance of multiple products, services, or rights to use assets within contractually binding arrangements. Significant contract interpretation is sometimes required to determine the appropriate accounting, including whether the deliverables specified in a multiple element arrangement should be treated as separate units of accounting for revenue recognition purposes, and if so, how the price should be allocated among the deliverable elements, when to recognize revenue for each element, and the period over which revenue should be recognized. We recognize revenue for delivered elements only when we determine that the fair values of undelivered elements are known and there are no uncertainties regarding customer acceptance.

Investments

Effective January 1, 2008, we adopted Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements.* In February 2008, the Financial Accounting Standards Board (FASB) issued FASB Staff Position (FSP) No. SFAS 157-2, *Effective Date of FASB Statement No. 157*, which provides a one year deferral of the effective date of SFAS No. 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. Therefore, we have adopted the provisions of SFAS No. 157 with respect to financial assets and liabilities only and will adopt the provisions for non-financial assets and non-financial liabilities effective December 29, 2008.

We determine fair value of our financial assets and liabilities in accordance with SFAS No. 157. Fair value is defined under SFAS No. 157 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under SFAS No. 157 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1 — Quoted prices in active markets for identical assets or liabilities.
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

In using this fair value hierarchy and the framework established by SFAS No. 157, management may be required to make assumptions of pricing by market participants and assumptions about risk, specifically when using unobservable inputs to determine fair value. These assumptions are judgmental in nature and may significantly affect our results of operations.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We evaluate the collectibility of our accounts receivable based on a combination of factors. We regularly analyze customer accounts, review the length of time receivables are outstanding and review historical loss rates. If the financial condition of our customers were to deteriorate, additional allowances could be required.

Inventory Valuation

We record adjustments to inventory for potentially excess, obsolete or impaired goods in order to state inventory at net realizable value. We must make assumptions about future demand, market conditions and the release of new products that will supersede old ones. We regularly review inventory for excess and obsolete products and components, taking into account product life cycle and development plans, product expiration and quality issues, historical experience and our current inventory levels. If actual market conditions are less favorable than anticipated, additional inventory adjustments could be required.

Contingencies

We are subject to legal proceedings primarily related to intellectual property matters. Based on the information available at the balance sheet dates and through consultation with our legal counsel, we assess the likelihood of any adverse judgments or outcomes of these matters, as well as the potential ranges of probable losses. If losses are probable and reasonably estimable, we will record a liability in accordance with SFAS No. 5, *Accounting for Contingencies*.

Goodwill and Intangible Asset Valuation

We make significant judgments in relation to the valuation of goodwill and intangible assets resulting from acquisitions and litigation settlements.

In determining the carrying amounts of our goodwill and intangible assets arising from acquisitions, we use the purchase method of accounting. The purchase method of accounting requires extensive use of accounting estimates and judgments to allocate the purchase price to the fair value of the net tangible and intangible assets acquired, including in-process research and development (IPR&D). Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to at least annual impairment tests. The amounts and useful lives assigned to other acquired intangible assets impact future amortization, and the amount assigned to IPR&D is expensed immediately.

Determining the fair values and useful lives of intangible assets acquired as part of litigation settlements also requires the exercise of judgment. While there are a number of different generally accepted valuation methods to estimate the value of intangible assets, we used the discounted cash flow method in determining the value of licensed technology associated with the settlement of our Affymetrix litigation. This method required significant management judgment to forecast the future operating results used in the analysis. In addition, other significant estimates were required such as residual growth rates and discount factors. The estimates we used to value and amortize intangible assets were consistent with the plans and estimates that we use to manage our business and were based on available historical information and industry estimates and averages. These judgments can significantly affect our net operating results.

SFAS No. 142, *Goodwill and Other Intangible Assets,* requires that goodwill and certain intangible assets be assessed for impairment using fair value measurement techniques. If the carrying amount of a reporting unit exceeds its fair value, then a goodwill impairment test is performed to measure the amount of the impairment loss, if any. The goodwill impairment test compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. The implied fair value of goodwill is determined in the same manner as in a business combination. Determining the fair value of the implied goodwill is judgmental in nature and often involves the use of significant estimates and assumptions. These estimates and assumptions could have a significant impact on whether or not an impairment charge is recognized and also the magnitude of any such charge. Estimates of fair value are primarily determined using discounted cash flows and market comparisons. These approaches use significant estimates and assumptions, including projection and timing of future cash flows, discount rates reflecting the risk inherent in future cash flows, perpetual growth rates, determination of appropriate market comparables, and determination of whether a premium or discount should be applied to comparables. It is reasonably possible that the plans and estimates used to value these assets may be incorrect. If our actual results, or the plans and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur additional impairment charges. We have performed our annual test of goodwill as of May 30, 2008, noting no impairment, and have determined there has been no impairment of goodwill through June 29, 2008.

Impairment of Long-Lived Assets

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets,* if indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, we measure the future discounted cash flows associated with the use of the asset and adjust the value of the asset accordingly. Certain estimates and assumptions are used in determining the fair value of long-lived assets. These estimates and assumptions are judgmental in nature and could have a significant impact on the determination of the recognition of an impairment charge and the magnitude of any such change. If our actual results, or the plans and estimates used in future impairment analyses, are lower than the original estimates used to assess the recoverability of these assets, we could incur additional impairment charges.

Stock-Based Compensation

We account for stock-based compensation in accordance with SFAS No. 123R, *Share-Based Payment.* Under the provisions of SFAS No. 123R, stock-based compensation cost is estimated at the grant date based on the award's fair-value as calculated by the Black-Scholes-Merton (BSM) option-pricing model and is recognized as expense over the requisite service period. The BSM model requires various highly judgmental assumptions including volatility, forfeiture rates, and expected option life. If any of these assumptions used in the BSM model change significantly, stock-based compensation expense resulting from new equity awards may differ materially in the future from that recorded in the current period.

Income Taxes

In accordance with SFAS No. 109, *Accounting for Income Taxes*, the provision for income taxes is computed using the asset and liability method, under which deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, and for the expected future tax benefit to be derived from tax loss and credit carryforwards. Deferred tax assets and liabilities are determined using the enacted tax rates in effect for the years in which those tax assets are expected to be realized. A valuation allowance is established when it is more likely than not the future realization of all or some of the deferred tax assets will not be achieved. The evaluation of the need for a valuation allowance is performed on a jurisdiction by jurisdiction basis, and includes a review of all available positive and negative evidence. As of June 29, 2008, we have maintained a valuation allowance only against certain U.S. and foreign deferred tax assets that we concluded have not met the "more likely than not" threshold required under SFAS No. 109.

Due to the adoption of SFAS No. 123R, we recognize excess tax benefits associated with share-based compensation to stockholders' equity only when realized. When assessing whether excess tax benefits relating to share-based compensation have been realized, we follow the with-and-without approach, excluding any indirect effects of the excess tax deductions. Under this approach, excess tax benefits related to share-based compensation are not deemed to be realized until after the utilization of all other tax benefits available to us.

Effective January 1, 2007, we adopted FASB Interpretation (FIN) No. 48, *Accounting for Uncertainty in Income Taxes — an interpretation of FASB Statement No. 109*, which clarifies the accounting for uncertainty in tax positions. FIN No. 48 requires that we recognize the impact of a tax position in our financial statements only if that position is more likely than not of being sustained upon examination by taxing authorities, based on the technical merits of the position. Any interest and penalties related to uncertain tax positions will be reflected in income tax expense.

Results of Operations

To enhance comparability, the following table sets forth our unaudited condensed consolidated statements of operations for the specified reporting periods stated as a percentage of total revenue.

	Three Months Ended		Six Months Ended	
	June 29, 2008	July 1, 2007	June 29, 2008	July 1, 2007
Revenue:				
Product revenue	92%	88%	91%	87%
Service and other revenue	8	12	9	13
Total revenue	100	100	100	100
Costs and expenses:				
Cost of product revenue	34	32	34	31
Cost of service and other revenue	2	4	3	4
Research and development	17	21	17	22
Selling, general and administrative	25	28	26	30
Impairment of manufacturing equipment	3	—	2	—
Amortization of intangible assets	2	1	2	1
Acquired in-process research and development	—	—	—	193
Total costs and expenses	83	86	84	281
Income (loss) from operations	17	14	16	(181)
Interest and other income, net	1	3	2	3
Income (loss) before income taxes	18	17	18	(178)
Provision for income taxes	7	6	7	6
Net income (loss)	11%	11%	11%	(184)%

Three and Six Months Ended June 29, 2008 and July 1, 2007

Our fiscal year consists of 52 or 53 weeks ending the Sunday closest to December 31, with quarters of 13 or 14 weeks ending the Sunday closest to March 31, June 30 and September 30. The three and six months ended June 29, 2008 and July 1, 2007 were both 13 and 26 weeks, respectively.

Revenue

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Product revenue	$128,552	$ 74,297	73%	$239,235	$ 135,562	76%
Service and other revenue	11,625	10,238	14%	22,803	21,123	8%
Total revenue	$ 140,177	$ 84,535	66%	$ 262,038	$ 156,685	67%

The increase in product revenue for both periods presented resulted primarily from higher consumable sales, as well as sales of the GAII. Growth in consumable revenue was primarily attributable to significant demand for our Infinium products, specifically the Human610-Quad, which we began shipping during the first quarter of 2008, and overall growth in our installed base of instruments. We expect product revenue to continue to increase, which can be mainly attributed to the launch of several new products, sales of existing products and the growth of our installed base of instruments.

Service and other revenue increased for both periods presented primarily due to the increase in extended warranty sales coupled with the completion of several significant Infinium and iSelect custom SNP genotyping service contracts. As product sales increase, we expect to see continued increases in the sale of our extended warranty contracts. We expect sales from SNP genotyping service contracts to fluctuate on a yearly and quarterly basis, depending on the mix, the number of contracts completed and the success of our certified service providers. The timing of completion of SNP genotyping service contracts is highly dependent on the customers' schedules for delivering the SNPs and samples to us.

Cost of Revenue

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Cost of product revenue	$ 47,148	$ 27,036	74%	$89,673	$ 48,850	84%
Cost of service and other revenue	3,311	3,105	7%	6,867	6,412	7%
Total cost of revenue	$ 50,459	$ 30,141	67%	$96,540	$55,262	75%

Cost of revenue, which excludes impairment of manufacturing equipment and amortization of intangible assets, represents manufacturing costs incurred in the production process, including component materials, assembly labor and overhead, installation, warranty, packaging and delivery costs, as well as costs associated with performing genotyping and sequencing services on behalf of our customers.

The increase in cost of product revenue for both periods presented was primarily driven by higher consumable and instrument sales, including increased sales of our GAII. Additionally, there was an increase in non-cash stock-based compensation expense included in cost of product revenue from $1.0 million and $1.8 million, respectively, for the three and six months ended July 1, 2007 to $1.3 million and $2.6 million, respectively, for the three and six months ended June 29, 2008.

Cost of service and other revenue increased for both periods presented primarily due to higher service revenue. Non-cash stock-based compensation expense included in cost of service and other revenue remained relatively consistent at $0.1 million and $0.2 million, respectively, for the three and six months ended June 29, 2008 as compared to $0.1 million for both the three and six months ended July 1, 2007.

Research and Development

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Research and development	$23,493	$18,184	29%	$44,057	$34,140	29%

Our research and development expenses consist primarily of salaries and other personnel-related expenses, laboratory supplies and other expenses related to the design, development, testing and enhancement of our products. We expense our research and development expenses as they are incurred.

Although research and development expenses as a percentage of revenue decreased to 17% for both the three and six months ended June 29, 2008, from 21% and 22%, respectively, for the three and six months ended July 1, 2007, there was an overall increase in research and development expenditures. Costs to support our BeadArray technology research activities increased approximately $3.2 million and $5.8 million, respectively, for the three and six months ended June 29, 2008, compared to the three months and six months ended July 1, 2007, primarily due to an overall increase in personnel-related expenses, increased lab and material expenses and the development of new products. Approximately $1.8 million and $3.7 million, respectively, of the increase for the three and six months ended June 29, 2008 is due to higher research and development expenses associated with the continued development of our Sequencing technology. In addition, non-cash stock-based compensation expense increased by approximately $1.0 million and $2.3 million, respectively, compared to the three and six months ended July 1, 2007. These increases were partially offset by a $0.9 million and $2.2 million, respectively, decrease in research and development expenses related to the VeraCode technology, compared to the three and six months ended July 1, 2007. We began shipping our BeadXpress System, which is based on our VeraCode technology, during the first quarter of 2007. As a result of completing the development of this product, the related research and development expenses have decreased.

We believe a substantial investment in research and development is essential to remaining competitive and expanding into additional markets. Accordingly, we expect our research and development expenses to increase in absolute dollars as we expand our product base.

Selling, General and Administrative

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Selling, general and administrative	$35,616	$23,297	53%	$69,443	$46,930	48%

Our selling, general and administrative expenses consist primarily of personnel costs for sales and marketing, finance, human resources, business development, legal and general management, as well as professional fees, such as expenses for legal and accounting services. Selling, general and administrative expenses as a percentage of revenue were 25% and 26%, respectively, for the three and six months ended June 29, 2008, compared to 28% and 30%, respectively, for the three and six months ended July 1, 2007. Selling, general and administrative expenses for the three and six months ended June 29, 2008 included stock-based compensation expenses totaling $7.4 million and $13.6 million, respectively, compared to $4.3 million and $9.1 million, respectively, for the three and six months ended July 1, 2007.

Sales and marketing expenses increased by $7.9 million for the three months ended June 29, 2008 compared to the three months ended July 1, 2007. The increase is primarily due to increases of $7.0 million attributable to personnel-related expenses to support the growth of our business, $0.5 million of non-cash stock-based compensation expense, and $0.4 million attributable to other non-personnel-related expenses consisting mainly of sales and marketing activities for our existing and new products. Included as part of these personnel-related expenses is employee travel expenses of $1.2 million due to increased headcount and continued international expansion. General and administrative expense increased by $4.4 million during the three months ended June 29, 2008, compared to the three months ended July 1, 2007. This increase was due to increases of $2.6 million of non-cash stock-based compensation expense and $1.8 million in personnel-related expenses associated with the growth of our business.

Sales and marketing expenses increased $17.9 million for the six months ended June 29, 2008, compared to the six months ended July 1, 2007. The increase is primarily due to increases of $14.5 million attributable to personnel-related expenses to support the growth of our business. Included as part of these personnel-related expenses is employee travel expenses of $2.8 million due to increased headcount and continued international expansion. The remaining $3.4 million increase is attributed to non-personnel-related costs of $2.3 million consisting mainly of sales and marketing activities for our existing and new products and $1.1 million of non-cash stock-based compensation expense. General and administrative expense increased $4.6 million during the six months ended June 29, 2008, compared to the six months ended July 1, 2007, due to increases of $4.4 million in personnel-related expenses associated with the growth of our business, $3.4 million of non-cash stock-based compensation expense and $0.3 million in outside consulting services offset by a decrease of $3.5 million in legal costs primarily related to the settlement of the Affymetrix litigation during the first quarter of 2008.

We expect our selling, general and administrative expenses to increase in absolute dollars as we expand our staff, add sales and marketing infrastructure and incur additional costs to support the growth in our business.

Impairment of Manufacturing Equipment

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Impairment of manufacturing equipment	$ 4,069	$ —	100%	$4,069	$ —	100%

The impairment of manufacturing equipment resulted from our assessment of recoverability on a portion of our imaging and decoding systems that were no longer being utilized due to the development of our next-generation system and our transition to the Infinium HD product line.

Amortization of Intangible Assets

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Amortization of intangible assets	$ 2,669	$ 662	303%	$5,084	$1,104	361%

Amortization of intangible assets as a percentage of revenue was 2% for both the three and six months ended June 29, 2008, compared to 1% for both the three and six months ended July 1, 2007. The increase in amortization expense is primarily due to the settlement of our lawsuit with Affymetrix on January 9, 2008 resulting in the recording of an intangible asset of $36.0 million. We began amortizing this asset during the first quarter of 2008, causing an increase in amortization of intangible assets of $2.0 million and $3.8 million, respectively, for the three and six months ended June 29, 2008 as compared to the three and six months ended July 1, 2007. The additional increase of $0.2 million during the six months ended June 29, 2008 as compared to the six months ended July 1, 2007 represents an additional month of amortization associated with the assets acquired from Solexa due to the timing of the acquisition in 2007.

Acquired In-Process Research and Development

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Acquired In-Process Research and Development	$ —	$ —	—%	$ —	$303,400	(100%)

As a result of the Solexa acquisition in January 2007, we recorded an acquired IPR&D charge of $303.4 million. No acquisitions resulting in similar charges occurred during the three and six months ended June 29, 2008.

Interest and Other Income, Net

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Interest and other income, net	$ 830	$ 2,343	(65%)	$ 4,410	$ 5,066	(13%)

Interest income on our cash and cash equivalents and investments was $2.0 million and $5.7 million for the three and six months ended June 29, 2008, compared to $4.1 million and $7.3 million for the three and six months ended July 1, 2007. The decrease in interest income over the prior period was primarily driven by lower interest rates on our cash and investment portfolio coupled with lower average cash balances.

Interest expense related to our convertible debt represented $1.0 million and $2.0 million, respectively, of interest and other income, net for the three and six months ended June 29, 2008 and $1.0 million and $1.5 million, respectively, of interest and other income, net for the three and six months ended July 1, 2007.

In addition, we recorded approximately $0.2 million in net foreign currency transaction losses for the three months ended June 29, 2008 and net foreign currency transaction gains of $0.7 million during the six months ended June 29, 2008. For both the three and six months ended July 1, 2007, net foreign currency transaction losses of $0.7 million were recorded.

Provision for Income Taxes

	Three Months Ended			Six Months Ended		
	June 29, 2008	July 1, 2007	Percentage Change	June 29, 2008	July 1, 2007	Percentage Change
	(in thousands)			(in thousands)		
Provision for income taxes	$ 9,303	$ 5,330	75%	$ 18,429	$ 9,727	89%

The provision for income taxes consists of federal, state, and foreign income tax expenses. The increase in the provision for income taxes for the three and six months ended June 29, 2008 as compared to the three and six months ended July 1, 2007 was primarily driven by the increase in the income (loss) before income taxes and the expiration of the U.S. federal research and development tax credit.

As of December 30, 2007, we had net operating loss carryforwards for federal and state tax purposes of approximately $28.7 million and $99.1 million, respectively, which begin to expire in 2025 and 2015, respectively, unless previously utilized. In addition, we also had U.S. federal and state research and development tax credit carryforwards of approximately $9.2 million and $9.3 million respectively, which begin to expire in 2018 and 2019 respectively, unless previously utilized.

Pursuant to Section 382 and 383 of the Internal Revenue Code, utilization of our net operating losses and credits may be subject to annual limitations in the event of any significant future changes in our ownership structure. These annual limitations may result in the expiration of net operating losses and credits prior to utilization. Previous limitations due to Section 382 and 383 have been reflected in the deferred tax assets as of June 29, 2008.

Based upon the available evidence as of June 29, 2008, we are not able to conclude it is more likely than not certain U.S. and foreign deferred tax assets will be realized. Therefore, we have recorded a valuation allowance of approximately $2.9 million and $25.8 million against certain U.S. and foreign deferred tax assets, respectively.

As of June 29, 2008, no material changes have been made to our uncertain tax positions recorded in 2007 in accordance with FIN No. 48, *Accounting for Uncertainty in Income Taxes — an Interpretation of FASB Statement No. 109*.

Liquidity and Capital Resources

Cashflow (in thousands)

	Six Months Ended	
	June 29, 2008	July 1, 2007
Net cash (used in) provided by operating activities	$ (25,532)	$ 39,126
Net cash used in investing activities	(45,507)	(103,924)
Net cash provided by financing activities	30,150	107,415
Effect of foreign currency translation on cash and cash equivalents	(1,084)	114
Net (decrease) increase in cash and cash equivalents	$ (41,973)	$ 42,731

Historically, our sources of cash have included:

- issuance of equity and debt securities, including cash generated from the exercise of stock options and participation in our Employee Stock Purchase Plan (ESPP);
- cash generated from operations, primarily from the collection of accounts receivable resulting from product sales; and
- interest income.

Our historical cash outflows have primarily been associated with:

- cash used for operating activities such as the purchase and growth of inventory, expansion of our sales and marketing and research and development infrastructure and other working capital needs;
- cash used for our stock repurchases;
- expenditures related to increasing our manufacturing capacity and improving our manufacturing efficiency;
- interest payments on our debt obligations; and
- in the first quarter of 2008, a $90.0 million one-time payment was made to Affymetrix on January 25, 2008, in accordance with the settlement agreement entered into on January 9, 2008.

Other factors that impact our cash inflow and outflow include:

- significant increases in our product and services revenue. As our product sales have increased significantly since 2001, operating income has increased significantly as well, providing us with an increased source of cash to finance the expansion of our operations; and
- fluctuations in our working capital;

As of June 29, 2008, we had cash, cash equivalents and short-term investments of $303.3 million, compared to $386.1 million as of December 30, 2007. We currently invest our funds in treasury notes, commercial paper, auction rate securities, corporate bonds and U.S. dollar-based short maturity mutual funds. We do not hold securities backed by mortgages. As of June 29, 2008, we had $55.9 million in auction rate securities issued primarily by municipalities and universities, which are classified as long-term investments. During the six months ended June 29, 2008, we recorded an unrealized loss of $3.1 million due to the failure associated with the auctions of each of these securities, which caused our ability to liquidate our investment and fully recover the carrying value in the near term to be limited or not exist. We have determined this reduction in fair value to be temporary. This unrealized loss reduced the fair value of our auction rate securities as of June 29, 2008 to $52.8 million. This value was determined in accordance with SFAS No. 157. We used Level 3 hierarchical inputs, due to the lack of actively traded market data, including management's assumptions of pricing by market participants and assumptions about risk. We based our fair value determination on estimated discounted future cash flows of interest income over a projected period reflective of the length of time the Company anticipates it will take the securities to become liquid. We considered any impairment on these investments to be temporary, thus any changes in fair value were recorded to other comprehensive income and there was no effect on operating income during the three and six months ended June 29, 2008. Refer to our Risk Factor: "Negative conditions in the global credit markets may impair the liquidity of a portion of our investment portfolio" under Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 30, 2007.

The primary inflows of cash during the six months ended June 29, 2008 were approximately $231.8 million from the sale and maturity of our investments in available-for-sale securities and approximately $28.0 million from the exercise of our stock options. The primary cash outflows during the six months ended June 29, 2008 were attributable to the purchase of available-for-sale securities for approximately $247.5 million, the one-time payment of $90.0 million made to Affymetrix in accordance with the settlement agreement and $29.8 million in capital expenditures primarily for construction-in-progress associated with the expansion of our San Diego facilities, additions to manufacturing equipment as well as the development of our manufacturing facility in Singapore.

Our primary short-term needs for capital, which are subject to change, include expenditures related to:

- our facilities expansion needs, including costs of leasing additional facilities;
- the acquisition of equipment and other fixed assets for use in our current and future manufacturing and research and development facilities;
- support of our commercialization efforts related to our current and future products, including expansion of our direct sales force and field support resources both in the United States and abroad;
- the continued advancement of research and development efforts; and
- improvements in our manufacturing capacity and efficiency.

We expect that our product revenue and the resulting operating income, as well as the status of each of our new product development programs, will significantly impact our cash management decisions.

Our outstanding convertible notes became convertible into cash and shares of our common stock as of March 31, 2008 and will continue to be convertible at least through, and including, September 30, 2008. Generally, upon conversion of a note, we must pay the conversion value of the note in cash, up to the principal amount of the note. Any excess of the conversion value over the principal amount is payable in shares of our common stock. We currently do not have sufficient cash to pay the cash amounts that would be due, based on current stock prices, if all the notes were converted. However, based on the current trading prices of the notes, we do not currently expect any notes to be converted through September 30, 2008, so long as they continue to trade at above their conversion value. However, holders of the notes may nonetheless convert their notes during this period. If we fail to deliver the consideration that is due upon conversion when required, we will be in default under the indenture for the notes, which may permit the noteholders to cause the notes to be immediately payable in full.

On July 22 2008, we announced our acquisition of Avantome, Inc. As consideration for the acquisition, we will pay $25.0 million in cash up front and may pay up to an additional $35.0 million in contingent cash consideration based on the achievement of certain milestones.

We anticipate that our current cash and cash equivalents and income from operations will be sufficient to fund our operating needs for at least the next 12 months, barring unforeseen circumstances. Operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures. At the present time, we have no material commitments for capital expenditures. Due to expansion of our facilities and manufacturing operations, we anticipate spending approximately $55.1 million in capital expenditures during 2008. Our future capital requirements and the adequacy of our available funds will depend on many factors, including:

- our ability to successfully commercialize our sequencing and VeraCode technologies and to expand our SNP genotyping and sequencing services product lines;
- scientific progress in our research and development programs and the magnitude of those programs;
- competing technological and market developments; and
- the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings.

As a result of the factors listed above, we may require additional funding in the future. Our failure to raise capital on acceptable terms, when needed, could have a material adverse effect on our business.

Recent Accounting Pronouncements

See Note 1 to our consolidated financial statements for a description of the effect of recently issued accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Sensitivity

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. The fair market value of fixed rate securities may be adversely impacted by fluctuations in interest rates while income earned on floating rate securities may decline as a result of decreases in interest rates. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. We attempt to ensure the safety and preservation of our invested principal funds by limiting default risk, market risk and reinvestment risk. We mitigate default risk by investing in investment grade securities. We have historically maintained a relatively short average maturity for our investment portfolio, and we believe a hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would not materially affect the fair value of our interest sensitive financial instruments. For example, if a 100 basis point change in overall interest rates were to occur in 2008, our interest income would change by approximately $3.0 million in relation to amounts we would expect to earn, based on our cash, cash equivalents, and available-for-sale investment securities as of June 29, 2008.

Market Price Sensitive Instruments

In order to potentially reduce equity dilution, we entered into convertible note hedge transactions, entitling us to purchase up to 11,451,480 shares of our common stock at an initial strike price of $43.66 per share, subject to adjustment. We also entered into warrant transactions with the counterparties of the convertible note hedge transactions. In addition, the Company sold to these counterparties warrants (the warrants) to acquire 9,161,160 shares of the Company’s common stock at an initial strike price of $62.87 per share, subject to adjustment, with the maximum number of shares issuable under these warrants to be capped at 18,322,320 should the convertible note hedge transaction be unwound. The anti-dilutive effect of the bond hedge transactions, if any, could be partially or fully offset to the extent the trading price of our common stock exceeds the strike price of the warrants on the exercise dates of the warrants, which occur during 2014, assuming the counterparties exercise those warrants.

Foreign Currency Exchange Risk

Although most of our revenue is realized in U.S. dollars, some portions of our revenue are realized in foreign currencies. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. The functional currencies of the majority of our subsidiaries are their respective local currencies. Accordingly, the accounts of these operations are translated from the local currency to the U.S. dollar using the current exchange rate in effect at the balance sheet date for the balance sheet accounts, and using the average exchange rate during the period for revenue and expense accounts. The effects of translation are recorded in accumulated other comprehensive income as a separate component of stockholders’ equity.

Item 4. Controls and Procedures.

We design our internal controls to provide reasonable assurance that (1) our transactions are properly authorized; (2) our assets are safeguarded against unauthorized or improper use; and (3) our transactions are properly recorded and reported in conformity with U.S. generally accepted accounting principles. We also maintain internal controls and procedures to ensure that we comply with applicable laws and our established financial policies.

We have carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Securities

Exchange Act), as of June 29, 2008. Based upon that evaluation, our principal executive officer and principal financial officer concluded that, as of June 29, 2008, our disclosure controls and procedures are effective to ensure that (a) the information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (b) such information is accumulated and communicated to our management, including our principal executive officer and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management have concluded that the disclosure controls and procedures are effective at the reasonable assurance level. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected.

An evaluation was also performed under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of any change in our internal control over financial reporting that occurred during the second quarter of 2008 and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. That evaluation did not identify any such change.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

In the recent past, we incurred substantial costs in defending ourselves against patent infringement claims and expect, going forward, to devote substantial financial and managerial resources to protect our intellectual property and to defend against any future claims asserted against us.

Applied Biosystems Litigation

On December 26, 2006, the Applied Biosystems Group of Applera Corporation (Applied Biosystems) filed suit in California Superior Court, Santa Clara County against Solexa (which we acquired on January 26, 2007). This State Court action was related to the ownership of several patents assigned in 1995 to Solexa's predecessor company (Lynx Therapeutics) by a former employee (Dr. Stephen Macevicz), who is the inventor of these patents and is named as a co-defendant in the suit. Lynx was originally a unit of Applied Biosystems but was spun out in 1992. On May 31, 2007, Applied Biosystems filed a second suit, this time against us, in the U.S. District Court for the Northern District of California. This second suit sought a declaratory judgment of non-infringement of the Macevicz patents that are the subject of the State Court action mentioned above. Both suits were later consolidated in the U.S. District Court for the Northern District of California, San Francisco Division. By these consolidated actions, Applied Biosytems is seeking ownership of the Macevicz patents, unspecified costs and damages, and a declaration of non-infringement and invalidity of these patents. Applied Biosystems is not asserting any claim for patent infringement against us.

The Macevicz patents relate to methods for sequencing DNA using successive rounds of oligonucleotide probe ligation (sequencing-by-ligation). Our Genome Analyzer products use a different technology called Sequencing-by-Synthesis (SBS), which we believe is not covered by any of these patents. In addition, we have no plans to use any of the Sequencing-by-Ligation technologies covered by these patents.

ITEM 1A. Risk Factors.

Our business is subject to various risks, including those described in Item 1A of our annual report on Form 10-K for the fiscal year ended December 30, 2007, which we filed with the SEC on February 26, 2008 and strongly encourage you to review. Except as set forth below, there have been no material changes from the risk factors disclosed in that section of our Form 10-K.

We no longer consider the risk factor in our annual report titled "*The combined company may fail to realize the anticipated benefits of the acquisition as a result of our failure to achieve anticipated revenue growth following the acquisition"* to be material. This risk factor, which addressed the realization of the anticipated benefits of our Solexa acquisition, is no longer considered material because we have experienced operating profits resulting from the acquisition. In addition, we no longer consider the risk factor in our annual report titled "*The accounting method for our convertible debt securities may be subject to change"* to be relevant, because the Financial Accounting Standards Board (FASB) issued FASB Staff Position (FSP) No. APB 14-1 in May 2008. This FSP finalized the proposed change in accounting treatment for our convertible notes. We refer you to the discussion under the heading "Recent Accounting Pronouncements" in Note 1 to our financial statements.

In addition, we consider the following additional risk factors to be relevant to our business:

We may not have the ability to pay the cash payments due upon conversion of our outstanding convertible notes.

In February 2007, we issued $400.0 million of 0.625% convertible senior notes due February 2014. The notes are convertible into cash and, if applicable, shares of our common stock only if specified conditions are satisfied. During the first quarter of 2008, we determined that one of these conditions was satisfied, and, accordingly, the notes were convertible from, and including, April 1, 2008 through, and including, June 30, 2008. The requirements of the same condition were again satisfied in the second quarter of 2008, and, accordingly, the Notes will continue to be convertible through, and including, September 30, 2008.

Generally, upon conversion of a note, we must pay the conversion value of the note in cash, up to the principal amount of the note. Any excess of the conversion value over the principal amount is payable in shares of our common stock. We currently do not have sufficient cash to pay the cash amounts that would be due, based on current stock prices, if all the notes were converted. However, as was the case during the second calendar quarter of 2008, the notes currently continue to trade above their conversion value. As a result, we do not currently expect any notes to be converted during the third calendar quarter of 2008. Holders of the notes may nonetheless convert their notes during this period.

If a significant amount of the notes are tendered for conversion, we may have to seek additional financing to satisfy our conversion obligation. We may be unable to obtain any needed additional financing on favorable terms, if at all. In addition, if we raise funds by issuing additional equity securities, our existing stockholders may experience dilution. Additional debt financing, if available, may subject us to restrictive covenants and will increase our interest expense. If we fail to deliver the consideration that is due upon conversion when required, we will be in default under the indenture for the notes, which may permit the noteholders to cause the notes to be immediately payable in full.

Loss of the tax deduction on our outstanding convertible notes.

We could lose some or all of the tax deduction for interest expense associated with our $400.0 million aggregate principal amount of convertible notes due in 2014 if the foregoing notes are not subject to the special Treasury Regulations governing integration of certain debt instruments, which we do not expect to be the case, the notes are converted, or we invest in non-taxable investments.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None during the second quarter of fiscal 2008.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Submission of Matters to a Vote of Security Holders.

Our 2007 Annual Meeting of Stockholders was held on May 16, 2008. Directors Daniel M. Bradbury and Roy A. Whitfield will continue to serve as directors with terms expiring at our 2011 Annual Meeting of Stockholders. Our stockholders ratified the appointment of Ernst & Young LLP as our independent auditors for 2008. Our stockholders also ratified an amendment to increase the maximum number of shares of common stock authorized for issuance under our 2005 Stock and Incentive Plan by 1,200,000 shares.

Our stockholders voted as follows on the proposals below:

1. Proposal to elect directors:

	For	Withhold Authority
Daniel M. Bradbury	50,326,890	2,017,976
Roy A. Whitfield	51,523,483	821,383

2. The vote on ratification of the appointment of Ernst & Young LLP as our independent auditors for 2008 was as follows:

For	52,252,008
Against	85,303
Abstain	7,555
Non Votes	0

3. The vote on ratification of the amendment to increase the maximum number of shares of common stock authorized for issuance under our 2005 Stock and Incentive Plan by 1,200,000 shares was as follows:

For	25,724,285
Against	19,179,703
Abstain	300,799
Non Votes	7,140,079

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number	Description of Document
10.43	Amended and Restated Stock and Incentive Plan.
10.53	Change in Control Severance Agreement between the Registrant and Gregory F. Heath.
10.54	Change in Control Severance Agreement between the Registrant and Joel McComb.
10.55	Indemnification Agreement between the Registrant and Gregory F. Heath.
10.56	Indemnification Agreement between the Registrant and Joel McComb.
31.1	Certification of Jay T. Flatley pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Christian O. Henry pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Jay T. Flatley pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Christian O. Henry pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Illumina, Inc.
(Registrant)

Date: July 25, 2008

/s/ Christian O. Henry
Christian O. Henry
Senior Vice President and Chief Financial Officer

EXHIBIT 10.43

ILLUMINA, INC.

2005 STOCK AND INCENTIVE PLAN

1. **Purposes of the Plan**. The purposes of this 2005 Stock and Incentive Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Service Providers, and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant. Stock Awards (including Stock Grants, Stock Units and Stock Appreciation Rights) and Cash Awards may also be granted under the Plan.

2. **Definitions**. As used herein, the following definitions shall apply:

(a) "**Administrator**" means the Board or any of its Committees as shall be administering the Plan, in accordance with Section 4 hereof.

(b) "**Applicable Laws**" means the requirements relating to the administration of stock option and restricted stock plans, the grant of options and the issuance of shares under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any Nasdaq National Market, stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any other country or jurisdiction where Options or Awards are granted under the Plan, as such laws, rules, regulations and requirements shall be in place from time to time.

(c) **"Award"** means an Option, a Stock Award or a Cash Award granted in accordance with the terms of the Plan.

(d) **"Award Agreement"** means a Stock Award Agreement, Cash Award Agreement and/or Option Agreement, which may be in written or electronic format, in such form and with such terms and conditions as may be specified by the Administrator, evidencing the terms and conditions of an individual Award. Each Award Agreement is subject to the terms and conditions of the Plan.

(e) "**Board**" means the Board of Directors of the Company.

(f) "**Cash Award**" means a bonus opportunity awarded under Section 15 pursuant to which a Participant may become entitled to receive an amount based on the satisfaction of such performance criteria as are specified in the agreement or other documents evidencing the Award (the " **Cash Award Agreement**").

(g) "**Code**" means the Internal Revenue Code of 1986, as amended.

(h) "**Committee**" means a committee of Directors appointed by the Board in accordance with Section 4 hereof.

(i) "**Common Stock**" means the common stock of the Company.

(j) "**Company**" means Illumina, Inc., a Delaware corporation.

(k) "**Consultant**" means any natural person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

(l) "**Corporate Transaction**" means any of the following, unless the Administrator provides otherwise:

(i) any merger or consolidation in which the Company shall not be the surviving entity (or survives only as a subsidiary of another entity whose stockholders did not own all or substantially all of the Common Stock in substantially the same proportions as immediately prior to such transaction),

(ii) the sale of all or substantially all of the Company's assets to any other person or entity (other than a wholly-owned subsidiary),

(iii) the acquisition of beneficial ownership of a controlling interest (including, without limitation, power to vote) the outstanding shares of Common Stock by any person or entity (including a "group" as defined by or under Section 13(d)(3) of the Exchange Act),

(iv) a contested election of Directors, as a result of which or in connection with which the persons who were Directors before such election or their nominees (the "**Incumbent Directors**") cease to constitute a majority of the Board; provided however that if the election, or nomination for election by the Company's stockholders, of any new director was approved by a vote of at least fifty percent (50%) of the Incumbent Directors, such new Director shall be considered as an Incumbent Director, or

(v) any other event specified by the Board or a Committee, regardless of whether at the time an Award is granted or thereafter.

(m) "**Director**" means a member of the Board.

(n) "**Disability**" means total and permanent disability as defined in Section 21(e)(3) of the Code.

(o) "**Effective Date**" means the date on which the Company's stockholders approve the Plan.

(p) "**Employee**" means any person, including Officers and Inside Directors, employed by the Company or any Parent or Subsidiary of the Company. An Employee shall not be deemed to cease Employee status by reason of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed ninety days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then three (3) months following the 91 st day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(q) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(r) "**Fair Market Value**" means, as of any date, the value of a Share determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on a national market system, including without limitation the Nasdaq National Market or the Nasdaq SmallCap Market of The Nasdaq Stock Market, the Fair Market Value of a Share shall be the closing selling price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share shall be the mean between the high bid and low asked prices for the Common Stock on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value shall be determined in good faith by the Administrator.

(s) "**Incentive Stock Option**" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder and as designated in the applicable Option Agreement.

(t) "**Inside Director**" means a Director who is an Employee.

(u) "**Nonstatutory Stock Option**" means an Option not intended to qualify as an Incentive Stock Option and/or as designated in the applicable Option Agreement.

(v) "**Notice of Grant**" means a written or electronic notice evidencing certain terms and conditions of an individual Option grant. The Notice of Grant is part of the Option Agreement.

(w) "**Officer**" means a person who is an executive officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(x) "**Option**" means a stock option granted pursuant to the Plan.

(y) "**Option Agreement**" means an agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(z) "**Optioned Shares**" means the Shares subject to an Option.

(aa) "**Optionee**" means the holder of an outstanding Option granted under the Plan.

(bb) "**Outside Director**" means a Director who is not an Employee.

(cc) "**Parent**" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code or any successor provision.

(dd) **"Participant"** means any holder of one or more Options, Stock Awards or Cash Awards, or the Shares issuable or issued upon exercise of such Awards, under the Plan.

(ee) "**Plan**" means this 2005 Stock and Incentive Plan.

(ff) "**Predecessor Plan**" means the Illumina, Inc. 2000 Stock Plan, as amended.

(gg) **"Qualifying Performance Criteria"** means any one or more of the following performance criteria, either individually, alternatively or in any combination, applied to either the Company as a whole or to a business unit, Parent, Subsidiary or business segment, either individually, alternatively or in any combination, and measured either annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, to previous years' results or to a designated comparison group, in each case as specified by the Committee in the Award: (i) cash flow; (ii) earnings (including gross margin, earnings before interest and taxes, earnings before taxes, and net earnings); (iii) earnings per share; (iv) growth in earnings or earnings per share;

(v) stock price; (vi) return on equity or average stockholders' equity; (vii) total stockholder return; (viii) return on capital; (ix) return on assets or net assets; (x) return on investment; (xi) revenue; (xii) income or net income; (xiii) operating income or net operating income; (xiv) operating profit or net operating profit; (xv) operating margin; (xvi) return on operating revenue; (xvii) market share; (xviii) contract awards or backlog; (xix) overhead or other expense reduction; (xx) growth in stockholder value relative to the moving average of the S&P 500 Index or a peer group index; (xxi) credit rating; (xxii) strategic plan development and implementation (including individual performance objectives that relate to achievement of the Company's or any business unit's strategic plan); (xxiii) improvement in workforce diversity, and (xxiv) any other similar criteria as may be determined by the Administrator. The Committee may appropriately adjust any evaluation of performance under a Qualifying Performance Criteria to exclude any of the following events that occurs during a performance period: (A) asset write-downs; (B) litigation or claim judgments or settlements; (C) the effect of changes in tax law, accounting principles or other such laws or provisions affecting reported results; (D) accruals for reorganization and restructuring programs; and (E) any gains or losses classified as extraordinary or as discontinued operations in the Company's financial statements.

(hh) "**Rule 16b-3**" means Rule 16b-3 of the Exchange Act, as the same may be amended from time to time, or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(ii) "**Service Provider**" means (i) an individual rendering services to the Company or any Parent or Subsidiary of the Company in the capacity of an Employee or Consultant or (ii) an individual serving as a Director.

(jj) "**Share**" means a share of the Common Stock, as adjusted in accordance with Section 17 hereof.

(kk) **"Stock Appreciation Right"** means a right to receive cash and/or Shares based on a change in the Fair Market Value of a specific number of Shares granted under Section 14.

(ll) **"Stock Award"** means a Stock Grant, a Stock Unit or a Stock Appreciation Right granted under Sections 13 or 14 below or other similar awards granted under the Plan (including phantom stock rights).

(mm) **"Stock Award Agreement"** means a written agreement, the form(s) of which shall be approved from time to time by the Administrator, between the Company and a holder of a Stock Award evidencing the terms and conditions of an individual Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(nn) **"Stock Grant"** means the award of a certain number of Shares granted under Section 13 below.

(oo) **"Stock Unit"** means a bookkeeping entry representing an amount equivalent to the Fair Market Value of one Share, payable in cash, property or Shares. Stock Units represent an unfunded and unsecured obligation of the Company, except as otherwise explicitly provided for by the Administrator.

(pp) "**Subsidiary**" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code, or any successor provision.

(qq) "**Withholding Taxes**" means the federal, state and local income and employment withholding taxes, or any other taxes required to be withheld, to which the holder of an Award may be subject in connection with the grant, exercise, or vesting of an Award or the issuance or transfer of Shares issued or issuable pursuant to an Award.

3. **Stock Subject to the Plan**.

(a) Subject to the provisions of Section 17 hereof, the maximum aggregate number of Shares that may be issued and sold under the Plan is 11,542,358 Shares. This maximum number of Shares reserved and available for issuance under the Stock Plan consists of Shares reserved for issuance under the Predecessor Plan that as of May 2, 2005 were either (i) available for grant pursuant to awards that may be made under the Predecessor Plan or (ii) subject to outstanding options granted under the Predecessor Plan which Shares might be returned to the Predecessor Plan but such Shares shall become available for issuance hereunder only if and to the extent the options granted under the Predecessor Plan to which they are subject terminate or expire or become unexercisable for any reason without having been exercised in full.

(b) An annual increase in the number of Shares reserved for issuance hereunder shall automatically occur on the first day of each fiscal year of the Company, beginning with fiscal year 2006 and ending with fiscal year 2010, equal to the lesser of (i) 1,200,000 Shares (subject to adjustment under Section 17), (ii) 5% of the outstanding Shares as of the last day of the immediately preceding fiscal year or (iii) a number of Shares determined by the Board. In addition to any increase, pursuant to the immediately preceding sentence, in the number of Shares reserved for issuance hereunder, the number of Shares reserved for issuance hereunder shall automatically increase, on May 16, 2008, by an additional 1,200,000 Shares. The Shares may be authorized, but unissued, or reacquired Shares, including Shares repurchased by the Company on the open market.

(c) If an outstanding Award expires or terminates for any reason prior to exercise in full, or without the Shares subject thereto having been issued in full, the unpurchased or unissued Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated); *provided, however*, that Shares that have actually been issued under the Plan pursuant to an Award shall not be returned to the Plan and shall not become available for future distribution under the Plan, except that if unvested Shares are repurchased by the Company at their original purchase price or otherwise forfeited to the Company in connection with termination of a Participant's status as a Service Provider, such Shares shall become available for future grant under the Plan. Should the exercise or purchase price of an Award under the Plan be paid with Shares (including by withholding Shares from the Award) or should Shares otherwise issuable under the Plan be withheld by the Company in satisfaction of the Withholding Taxes incurred in connection with the exercise, purchase or issuance of Shares under an Award, then the number of Shares available for issuance under the Plan shall be reduced by the gross number of Shares issued in connection with the Award, and not by the net number of Shares issued to the holder of such Award.

4. **Administration of the Plan**.

(a) **Procedure**.

(i) **Multiple Administrative Bodies**. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) **Section 162(m)**. To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as "performance-based compensation" within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more "outside directors" within the meaning of Section 162(m) of the Code.

(iii) **Rule 16b-3**. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.

(iv) **Other Administration**. Other than as provided above, the Plan shall be administered by (A) the Board, (B) a Committee, which committee shall be constituted to satisfy Applicable Laws or (C) subject to the Applicable Laws, one or more officers of the Company to whom the Board or Committee

has delegated the power to grant Awards to persons eligible to receive Awards under the Plan provided such grantees may not be officers or Directors.

(b) **Powers of the Administrator**. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:

(A) to determine the Fair Market Value of the Common Stock in accordance with Section 2(r) of the Plan;

(B) to select the Service Providers to whom Awards may be granted hereunder;

(C) to determine the number of Shares or amount of cash to be covered by each Award granted hereunder;

(D) to approve forms of Award Agreements for use under the Plan;

(E) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder, which terms and conditions include, but are not limited to, the exercise price and/or purchase price (if applicable), the time or times when Awards may be exercised (which may be based on performance criteria), the vesting schedule, any vesting and/or exercisability acceleration or waiver of forfeiture restrictions, the acceptable forms of consideration, the term and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine and may be established at the time an Award is granted or thereafter;

(F) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(G) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

(H) to modify or amend each Award (subject to Section 19) hereof), including the discretionary authority to extend the post-termination exercisability or purchase period of Awards longer than is originally provided for in the Award Agreement;

(I) to allow Participants to satisfy Withholding Tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise or settlement of an Award that number of Shares having a Fair Market Value equal to the minimum amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of Withholding Tax is to be determined. All elections by a Participant to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable;

(J) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(K) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) **Effect of Administrator's Decision**. The Administrator's decisions, determinations and interpretations shall be final and binding on all Participants and any other holders of Options, Stock Awards, Cash Awards or Shares issued under the Plan.

5. **Eligibility**. Nonstatutory Stock Options and Stock Awards may be granted to Service Providers. Incentive Stock Options and Cash Awards may be granted only to Employees.

6. **Limitations**.

(a) Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding designation as an Incentive Stock Option, no installment under such an Option shall qualify for favorable tax treatment as an Incentive Stock Option if (and to the extent) the aggregate Fair Market Value of the Shares (determined at the date of grant) for which such installment first becomes exercisable hereunder would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Shares or other securities for which such Option or any other Incentive Stock Options granted to Optionee prior to the date of grant (whether under the Plan or any other plan of the Company or any Parent or Subsidiary of the Company) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. Should such One Hundred Thousand Dollar ($100,000) limitation be exceeded in any calendar year, the Option shall nevertheless become exercisable for the excess Optioned Shares in such calendar year as a Nonstatutory Stock Option. For purposes of this Section 6(a), Incentive Stock Options shall be taken into account in the order in which they were granted.

(b) Neither the Plan nor any Award shall confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor shall they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause.

(c) The following limitations shall apply to grants of Options and Stock Awards:

(i) No Service Provider shall be granted, in any fiscal year of the Company, Awards covering more than 500,000 Shares, subject to adjustment as provided in Section 17 below.

(ii) However, in connection with his or her commencement of Service Provider status, an individual may be granted Awards covering up to an additional 1,000,000 Shares during the fiscal year in which such commencement occurs, which shall not count against the limit set forth in subsection (i) above and subject to adjustment as provided in Section 17 below.

7. **Term of Plan**. The Plan shall become effective on the Effective Date. Unless the Plan is terminated earlier pursuant to Section 19 hereof, the Plan shall terminate upon the earliest to occur of (a) June 28, 2015, (b) the date on which all Shares available for issuance under the Plan shall have been issued as fully vested Shares or (c) the termination of all outstanding Awards in connection with a dissolution or liquidation pursuant to Section 17(b) hereof or a Corporate Transaction pursuant to Section 17(c) hereof. Should the Plan terminate on June 28, 2015, then all Awards outstanding at that time shall continue to have force and effect in accordance with the provisions of the applicable Award Agreement.

8. **Term of Option**. The term of each Option shall be stated in the Option Agreement; provided, however that the term shall be no more than ten (10) years from the date of grant or such shorter term as may be provided in the Option Agreement. Moreover, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.

9. **Option Exercise Price and Consideration**.

(a) **Exercise Price**. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option shall be determined by the Administrator, subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a merger or other corporate transaction.

(b) **Waiting Period and Exercise Dates**. At the time an Option is granted, the Administrator shall fix the period within which the Option may be exercised and shall determine any conditions (including any vesting conditions) that must be satisfied before the Option may be exercised.

(c) **Form of Consideration**. The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. Such consideration may consist entirely of:

(i) cash;

(ii) check;

(iii) promissory note;

(iv) other Shares which, in the case of Shares acquired directly or indirectly from the Company, (A) have been owned by the Optionee for more than six (6) months on the date of surrender (if it is required to eliminate or reduce accounting charges incurred by the Company in connection with the Option, or such other period (if any) required to so eliminate or reduce such charges), and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised;

(v) consideration received through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable instructions to (A) a Company-designated brokerage firm to effect the immediate sale of the purchased Shares and remit to the Company, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased Shares plus all Withholding Taxes required to be withheld by the Company by reason of such exercise and (B) the Company to deliver the certificates for the purchased Shares directly to such brokerage firm in order to complete the sale;

(vi) a reduction in the amount of any Company liability to the Optionee, including any liability attributable to the Optionee's participation in any Company-sponsored deferred compensation program or arrangement;

(vii) any combination of the foregoing methods of payment; or

(viii) such other consideration and method of payment for the issuance of Optioned Shares as determined by the Administrator and to the extent permitted by Applicable Laws.

(d) **No Option Repricings**. Other than in connection with a change in the Company's capitalization (as described in Section 17(a) of the Plan), the exercise price of an Option may not be reduced without stockholder approval.

10. **Exercise of Option**.

(a) **Procedure for Exercise; Rights as a Stockholder**.

(i) Any Option granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. Unless the Administrator provides otherwise, vesting of Options granted hereunder shall be suspended during any unpaid leave of absence. An Option may not be exercised for a fraction of a Share.

(ii) An Option shall be deemed exercised when the Company receives: (A) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (B) full payment for the Optioned Shares with respect to which the Option is exercised and (C) satisfaction of any Withholding Taxes. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Plan and shall be set forth in the Option Agreement. Shares issued upon exercise of an Option shall be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Shares, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 17 hereof.

(iii) Exercising an Option in any manner shall decrease the number of Optioned Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) **Termination of Relationship as a Service Provider**. If an Optionee ceases to be a Service Provider, other than upon the Optionee's death or Disability, such Optionee may exercise his or her Option for a period of three (3) months measured from the date of termination, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of the Option as set forth in the Option Agreement). If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Option shall immediately terminate as to all the Optioned Shares covered by the unvested portion of the Option, and those Optioned Shares shall revert immediately to the Plan. To the extent the Optionee does not, within the post-termination time period specified in the Option Agreement, exercise the Option for the Optioned Shares in which Optionee is vested at the time of such termination of Service Provider status, the Option shall terminate with respect to those vested Optioned Shares at the end of such period, and those Optioned Shares shall revert to the Plan.

(c) **Disability of Optionee**. If an Optionee ceases to be a Service Provider as a result of the Optionee's Disability, the Optionee may exercise his or her Option within twelve (12) months of termination, or such longer period of time as specified in the Option Agreement, to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Option shall immediately terminate as to the Optioned Shares covered by the unvested portion of the Option, and those Optioned Shares shall revert immediately to the Plan. To the extent the Optionee does not, within the post-

termination time period specified in the Option Agreement, exercise the Option for the Optioned Shares in which Optionee is vested at the time of such termination of Service Provider status, the Option shall terminate with respect to those vested Optioned Shares at the end of such period, and those Optioned Shares shall revert to the Plan.

(d) **Death of Optionee**. If an Optionee dies while a Service Provider, the Option may be exercised within twelve (12) months following Optionee's death, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of death (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement) by the Optionee's designated beneficiary, provided such beneficiary has been designated prior to Optionee's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Optionee, then such Option may be exercised by the personal representative of the Optionee's estate or by the person(s) to whom the Option is transferred pursuant to the Optionee's will or in accordance with the laws of descent and distribution. If, at the time of death, the Optionee is not vested as to his or her entire Option, the Option shall immediately terminate as to the Optioned Shares covered by the unvested portion of the Option, and those Optioned Shares shall immediately revert to the Plan. To the extent the Option is not, within the post-termination time period specified in the Option Agreement, exercised for the Optioned Shares in which Optionee is vested at the time of such termination of Service Provider status, the Option shall terminate with respect to those vested Optioned Shares, and those Optioned Shares shall revert to the Plan.

11. **Formula Option Grants to Outside Directors**. Outside Directors shall automatically be granted Options in accordance with the following provisions:

(a) All Options granted pursuant to this Section shall be Nonstatutory Stock Options and, except as otherwise provided in this Section 11, shall be subject to the other terms and conditions of the Plan.

(b) Each individual who becomes an Outside Director after the Effective Date shall be automatically granted an Option to purchase 20,000 Shares subject to adjustment as set forth in Section 17(a) below (the "First Option") on the date such individual is elected as a Director, whether through election by the stockholders of the Company or appointment by the Board to fill a vacancy; *provided, however,* that an Inside Director who ceases to be an Inside Director but who remains a Director shall not receive a First Option.

(c) On each annual stockholder meeting commencing with the Effective Date, each Outside Director who continues to serve in such capacity immediately after such annual stockholder meeting shall be automatically granted an Option to purchase 7,500 Shares and 1,000 Stock Units subject to adjustment as set forth in Section 17(a) below (a "Subsequent Option"); provided that the Outside Director has served on the Board for at least six calendar months prior to the date of such annual stockholder meeting.

(d) The terms of a First Option or a Subsequent Option granted pursuant to this Section shall be as follows:

(i) The term of the Option shall be ten (10) years measured from the date of grant.

(ii) The Option shall be exercisable only during the time that the Outside Director remains a Director and, with respect to Optioned Shares vested on the last day of service as a Director for the six (6) month period following the date of the Optionee's cessation of service as a Director, *provided, however*, that the Option cannot be exercised after the expiration of the term of the Option. If, at the time of Optionee's cessation of service as a Director, the Optionee is not vested as to his or her entire Option, the Option shall immediately terminate as to the Optioned Shares covered by the unvested portion of the Option, and those Optioned Shares shall immediately revert to the Plan. To the extent the Option is not, within the post-termination time period specified in the Option Agreement, exercised for the Optioned Shares in which the Optionee is vested at the time of his or her cessation of Director status, the Option shall terminate with respect to those vested Optioned Shares, and those Optioned Shares shall revert to the Plan.

(iii) The exercise price per Share shall be 100% of the Fair Market Value per Share on the date of grant of the Option.

(iv) The First Option shall vest and become exercisable as to 33% of the Optioned Shares on each of the first three anniversaries of its date of grant, provided that the Optionee continues to serve as a Director on such dates.

(v) The Subsequent Option shall vest and become exercisable as to 100% of the Optioned Shares on the earlier of (i) the one year anniversary of the date of grant of the Option and (ii) the date immediately preceding the date of the annual meeting of the Company's stockholders for the year following the year of grant of the Option, provided that the Optionee continues to serve as a Director on such date.

(vi) If an Outside Director dies or ceases to serve as a Director as a result of the Outside Director's Disability while holding any outstanding Option under this Section 11, then that Option may be exercised within six (6) months following his or her death or termination, or such longer period of time as specified in the Option Agreement, to the extent that the Option is vested on the date of death or termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement) by the Outside Director's or the Outside Director's designated beneficiary, provided such beneficiary has been designated prior to his or her death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Outside Director, then such Option may be exercised by the personal representative of his or her estate or by the person(s) to whom the Option is transferred pursuant to his or her will or in accordance with the laws of descent and distribution. If, at the time of death or termination as a result of Disability, the Outside Director is not vested as to his or her entire Option, the Option shall immediately terminate as to the Optioned Shares covered by the unvested portion of the Option, and those Optioned Shares shall immediately revert to the Plan. To the extent the Option is not, within the post-termination time period specified in the Option Agreement, exercised for the Optioned Shares in which the Outside Director is vested at the time of death or termination as a result of Disability, the Option shall terminate with respect to those vested Optioned Shares, and those Optioned Shares shall revert to the Plan.

(vii) In the event of a Corporate Transaction, all Options granted pursuant to this Section II shall be subject to the terms and conditions of Section 17©; provided that in the event that the successor corporation does not assume or substitute for each First Option and Subsequent Option, the Optionee shall fully vest in and have the right to exercise the Option as to all of the Optioned Shares, including Shares as to which it would not otherwise be vested or exercisable.

(e) The Board shall have sole and exclusive authority to establish, maintain, amend, suspend, and terminate any program by which Outside Directors are automatically granted Nonstatutory Stock Options pursuant to this Section 11.

12. **Limited Transferability of Options**. An Option generally may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee; provided however that Nonstatutory Stock Options may be transferred by instrument to an inter vivos or testamentary trust in which the Nonstatutory Stock Options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift or pursuant to domestic relations orders to "Immediate Family Members" (as defined below) of the Optionee. "**Immediate Family**" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships), a trust in which these persons have more than fifty percent of the beneficial interest, a foundation in which these persons (or the Optionee) control the management of assets, and any other entity in which these persons (or the Optionee) own more than fifty percent of the voting interests. The Optionee may designate one or more persons as the beneficiary or beneficiaries of his or her outstanding Options, and those Options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those Options. Such beneficiary or beneficiaries shall take the transferred Options subject to all the terms and conditions of the applicable agreement evidencing each such

transferred Option, including (without limitation) the limited time period during which the Option may be exercised following the Optionee's death.

13. **Stock Grants and Stock Unit Awards.** Each Stock Award Agreement reflecting the issuance of a Stock Grant or Stock Unit shall be in such form and shall contain such terms and conditions as the Administrator shall deem appropriate. The terms and conditions of such agreements may change from time to time, and the terms and conditions of separate agreements need not be identical, but each such agreement shall include (through incorporation of provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(a) Consideration. A Stock Grant or Stock Unit may be awarded in consideration for such property or services as is permitted under Applicable Law, including for past services actually rendered to the Company or a Subsidiary for its benefit.

(b) Vesting. Shares of Common Stock awarded under an agreement reflecting a Stock Grant and a Stock Unit award may, but need not, be subject to a share repurchase option, forfeiture restriction or other conditions in favor of the Company in accordance with a vesting or lapse schedule to be determined by the Administrator.

(c) Termination of Participant's Relationship as a Service Provider. In the event a Participant's relationship as a Service Provider terminates, the Company may reacquire any or all of the Shares held by the Participant which have not vested or which are otherwise subject to forfeiture or other conditions as of the date of termination under the terms of the agreement.

(d) Transferability. Except as determined by the Board, no rights to acquire Shares under a Stock Grant or a Stock Unit shall be assignable or otherwise transferable by the Participant except by will or by the laws of descent and distribution.

14. **Stock Appreciation Rights.**

(a) **General.** Stock Appreciation Rights may be granted either alone, in addition to, or in tandem with other Awards granted under the Plan. The Administrator may grant Stock Appreciation Rights to eligible Participants subject to terms and conditions not inconsistent with this Plan and determined by the Administrator. The specific terms and conditions applicable to the Participant shall be provided for in the Stock Award Agreement. Stock Appreciation Rights shall be exercisable, in whole or in part, at such times as the Administrator shall specify in the Stock Award Agreement.

(b) **Exercise of Stock Appreciation Right.** Upon the exercise of a Stock Appreciation Right, in whole or in part, the Participant shall be entitled to a payment in an amount equal to the excess of the Fair Market Value on the date of exercise of a fixed number of Shares covered by the exercised portion of the Stock Appreciation Right, over the Fair Market Value on the grant date of the Shares covered by the exercised portion of the Stock Appreciation Right (or such other amount calculated with respect to Shares subject to the award as the Administrator may determine). The amount due to the Participant upon the exercise of a Stock Appreciation Right shall be paid in such form of consideration as determined by the Administrator and may be in cash, Shares or a combination thereof, over the period or periods specified in the Stock Award Agreement. A Stock Award Agreement may place limits on the amount that may be paid over any specified period or periods upon the exercise of a Stock Appreciation Right, on an aggregate basis or as to any Participant. A Stock Appreciation Right shall be considered exercised when the Company receives written notice of exercise in accordance with the terms of the Stock Award Agreement from the person entitled to exercise the Stock Appreciation Right.

(c) **Transferability**. Except as determined by the Board, no Stock Appreciation Rights shall be assignable or otherwise transferable by the Participant except by will or by the laws of descent and distribution.

15. **Cash Awards.** Each Cash Award will confer upon the Participant the opportunity to earn a future payment tied to the level of achievement with respect to one or more performance criteria established for a performance period of not less than one (1) year.

(a) **Cash Award**. Each Cash Award shall contain provisions regarding (i) the target and maximum amount payable to the Participant as a Cash Award, (ii) the Qualifying Performance Criteria and level of achievement versus these criteria which shall determine the amount of such payment, (iii) the period as to which performance shall be measured for establishing the amount of any payment, (iv) the timing of any payment earned by virtue of performance, (v) restrictions on the alienation or transfer of the Cash Award prior to actual payment, (vi) forfeiture provisions, and (vii) such further terms and conditions, in each case not inconsistent with the Plan, as may be determined from time to time by the Administrator. The maximum amount payable as a Cash Award may be a multiple of the target amount payable, but the maximum amount payable pursuant to that portion of a Cash Award granted under this Plan for any fiscal year to any Participant shall not exceed U.S. $1,000,000.

(b) **Performance Criteria**. The Administrator shall establish the Qualifying Performance Criteria and level of achievement versus these criteria which shall determine the target and the minimum and maximum amount payable under a Cash Award. The Administrator may specify the percentage of the target Cash Award that is intended to satisfy the requirements for "performance-based compensation" under Section 162(m) of the Code. Notwithstanding anything to the contrary herein, the performance criteria for any portion of a Cash Award that is intended to satisfy the requirements for "performance-based compensation" under Section 162(m) of the Code shall be a measure established by the Administrator based on one or more Qualifying Performance Criteria selected by the Administrator and specified in writing not later than 90 days after the commencement of the period of service to which the performance goals relates, provided that the outcome is substantially uncertain at that time (or in such other manner that complies with Section 162(m)).

(c) **Timing and Form of Payment.** The Administrator shall determine the timing of payment of any Cash Award. The Administrator may provide for or, subject to such terms and conditions as the Administrator may specify and Applicable Laws, may permit a Participant to elect for the payment of any Cash Award to be deferred to a specified date or event. The Administrator may specify the form of payment of Cash Awards, which may be cash or other property, or may provide for a Participant to have the option for his or her Cash Award, or such portion thereof as the Administrator may specify, to be paid in whole or in part in cash or other property.

(d) **Termination of Relationship as a Service Provider**. The Administrator shall have the discretion to determine the effect of a termination as a Service Provider due to (i) Disability, (ii) death or (iii) otherwise shall have on any Cash Award.

16. **Section 162(m) Compliance.** Any Stock Award (other than an Option or any other Stock Award having a purchase price equal to 100% of the Fair Market Value on the date such award is made) or Cash Award that is intended as "qualified performance-based compensation" within the meaning of Section 162(m) of the Code must vest or become exercisable or payable contingent on the achievement of one or more Qualifying Performance Criteria. Notwithstanding anything to the contrary herein, the Committee shall have the discretion to determine the time and manner of compliance with Section 162(m) of the Code as required under applicable regulations and to conform the procedures related to the Award to the requirements of Section 162(m) and may in its discretion reduce the number of Shares granted or amount of cash or other property to which a Participant may otherwise have been entitled with respect to an Award designed to qualify as performance-based compensation under Section 162(m).

17. **Adjustments Upon Changes in Capitalization, Dissolution or Corporate Transaction**.

(a) **Changes in Capitalization**. Subject to any required action by the stockholders of the Company, (i) the number of Shares which have been authorized for issuance under the Plan but as to which no Awards have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Award,

(ii) the number of Shares that may be added annually to the Plan pursuant to Section 3(b)(i) hereof, (iii) the number of Optioned Shares granted under First Options and Subsequent Options under Section 11 hereof, (iv) the maximum numbers of Shares that may be granted under Awards to any Service Provider within any fiscal year as set forth in Section 6(c) and (v) the number of Shares as well as the price per Share subject to each outstanding Award, shall be proportionately adjusted for any increase or decrease in the number of issued Shares resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued Shares effected without receipt of consideration by the Company; *provided, however,* that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Administrator, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares.

(b) **Dissolution or Liquidation**. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Participant as soon as practicable prior to the effective date of such proposed transaction. The Administrator in its discretion may (but need not) provide for a Participant to have the right to exercise his or her Option or Stock Award until ten (10) days prior to such transaction as to all of the Shares covered thereby, including Shares as to which the Option or Stock Award would not otherwise be exercisable. In addition, the Administrator may (but need not) provide that any Company repurchase option applicable to any unvested Shares purchased upon exercise of an Option or issued under a Stock Award shall lapse as to all such Shares, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) **Corporate Transaction**.

(i) In the event of a Corporate Transaction, as determined by the Board or a Committee, the Board or Committee may, in its discretion, (i) provide for the assumption or substitution of, or adjustment to, each outstanding Award; (ii) accelerate the vesting of Options and terminate any restrictions on Cash Awards or Stock Awards; and/or (iii) provide for termination of Awards as a result of the Corporate Transaction on such terms and conditions as it deems appropriate, including providing for the cancellation of Awards for a cash payment to the Participant. For the purposes of this paragraph, the Award shall be considered assumed if, following the Corporate Transaction, the Award confers the right to purchase or receive, for each Share or amount of cash covered by the Award immediately prior to the Corporate Transaction, the consideration (whether stock, cash, or other securities or property) received in the Corporate Transaction by holders of Common Stock for each Share held on the effective date of the Corporate Transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); *provided, however,* that if such consideration received in the Corporate Transaction is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Award, for each Share covered by the Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Shares in the Corporate Transaction.

(ii) Each Option or Stock Award which is assumed pursuant to this Section 17(c) shall be appropriately adjusted, immediately after such Corporate Transaction, to apply to the number and class of securities which would have been issuable to the Participant in consummation of such Corporate Transaction had the Option or Stock Award been exercised immediately prior to such Corporate Transaction. Appropriate adjustments to reflect such Corporate Transaction shall also be made to (A) the exercise or purchase price payable per share under each outstanding Option or Stock Award, provided the aggregate exercise or purchase price payable for such securities shall remain the same, (B) the maximum number and/or class of securities available for issuance over the remaining term of the Plan, (C) the maximum number and/or class of securities for which any one person may be granted Options or Stock Awards under the Plan per year, (D) the maximum number and/or class of securities by which the share reserve is to increase automatically each year and (E) the number and/or class of securities subject to the Options granted under Section 11.

18. **Date of Grant**. The date of grant of a First Option or Subsequent Option shall be the date on which it was automatically granted pursuant to Section 11 hereof. The date of grant of any other Award shall be, for all purposes, the date on which the Administrator grants such Award. Notice of the grant shall be provided to each Participant within a reasonable time after the date of such grant.

19. **Amendment and Termination of the Plan**. The Board may at any time amend, alter, suspend or terminate the Plan. However, the Company shall obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws. In addition, no amendment, alteration, suspension or termination of the Plan shall impair the rights of any Participant under any grant theretofore made, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination. In addition, unless approved by the stockholders of the Company, no amendment shall be made that would result in a repricing of Options by (x) reducing the exercise price of outstanding Options or (y) canceling an outstanding Option held by a Participant and re-granting to the Participant a new Option with a lower exercise price, in either case other than in connection with a change in the Company's capitalization pursuant to Section 17(a) of the Plan.

20. **Conditions Upon Issuance of Shares**.

(a) Awards shall not be granted and Shares shall not be issued pursuant to the exercise of an Award unless the grant of the Award, the exercise or settlement of such Award and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) No Shares or other assets shall be issued or delivered under the Plan unless and until there shall have been compliance with all applicable requirements of Federal and state securities laws, including the filing and effectiveness of the Form S-8 registration statement for the Shares, and all applicable listing requirements of any stock exchange (or the Nasdaq National Market, if applicable) on which Common Stock is then listed for trading.

21. **Inability to Obtain Authority**. The inability of the Company to obtain authority from any regulatory body having jurisdiction (including under Section 20), which authority is deemed by the Company's counsel to be necessary to the lawful grant of Awards and issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to grant such Awards or issue or sell such Shares as to which such requisite authority shall not have been obtained.

22. **Reservation of Shares**. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

23. **Stockholder Approval**. If required by Applicable Laws, continuance of the Plan shall be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted or after any amendment requiring stockholder approval is made. Such stockholder approval shall be obtained in the manner and to the degree required under Applicable Laws.

EXHIBIT 10.53

ILLUMINA, INC.

CHANGE IN CONTROL
SEVERANCE AGREEMENT

This CHANGE IN CONTROL SEVERANCE AGREEMENT, made as of the date of the last signature shown below (the " Effective Date"), by and between ILLUMINA, INC., a Delaware corporation (the " Company") and Gregory F. Heath, Ph.D. (the "Executive").

WHEREAS, the Executive is a key member of the management of the Company, and the Board of Directors of the Company (the "Board") considers it to be in the best interests of the Company and its stockholders to foster the retention of its key management personnel;

WHEREAS, it is expected that from time to time the Board may consider the possibility of a Change in Control of the Company, and the Board recognizes that a Change in Control and the uncertainties that it may raise among management could result in the departure or distraction of management personnel to the detriment of the Company; and

WHEREAS, this Agreement is intended to create an incentive for the Executive to remain in the employ of the Company and to maximize the value of the Company for the benefit of the stockholders in connection with a Change in Control.

NOW, THEREFORE, in consideration of the covenants herein contained and the continued employment of the Executive, the parties hereto agree as follows:

1. Agreement Term

This Agreement shall be effective during the period beginning with the Effective Date and ending on August 21, 2009 (the "Initial End Date"), provided that such period shall be automatically extended for an additional year on each anniversary of the Initial End Date, unless written notice of non-extension is provided by either party to the other party at least 90 days prior to such anniversary (the " Agreement Term").

In the event of a Change in Control occurring during the Agreement Term, the provisions of this Agreement relating to severance rights and benefits of the Executive shall apply with respect to any Covered Termination that occurs during the Protection Period that follows the Change in Control, as provided in Section 3 hereof. The obligations of the Company hereunder with respect to any such Covered Termination shall survive the expiration of the Agreement Term.

2. Change in Control

For purposes of this Agreement, " Change in Control" shall mean the occurrence of one of the following during the Agreement Term:

(a) any merger or consolidation in which the Company shall not be the surviving entity (or survives only as a subsidiary of another entity whose stockholders did not own all or substantially all of the Company's common stock in substantially the same proportions as immediately prior to such transaction);

(b) the sale of all or substantially all of the Company's assets to any other person or entity (other than a wholly-owned subsidiary);

(c) the acquisition of beneficial ownership of a controlling interest (including, without limitation, power to vote) in the outstanding shares of the Company's common stock by any person or entity (including a "group" as defined by or under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended);

(d) a contested election of directors of the Company, as a result of which or in connection with which the persons who were directors before such election or their nominees (the "Incumbent Directors") cease to constitute a majority of the Board; provided, however that if the election, or nomination for election by the Company's stockholders, of any new director was approved by a vote of at least fifty percent (50%) of the Incumbent Directors, such new director shall be considered as an Incumbent Director, or

(e) any other event specified by the Board.

3. Covered Terminations

(a) General. For purposes of this Agreement, "Covered Termination" shall mean the occurrence of one of the following during the period beginning on the date of the event that constitutes a Change in Control and ending on the second anniversary of such date (the " Protection Period"):

(i) termination of employment by the Company other than for " Cause" (as defined in Section 3(b) below); or

(ii) termination of employment by the Executive on account of " Good Reason" (as defined in Section 3(c) below).

In addition, if the Executive is terminated by the Company other than for Cause following the execution of a definitive agreement or the occurrence of such other definitive event which if consummated will result in a Change in Control, but prior to the consummation of the Change in Control, such termination will be deemed a Covered Termination to the extent the Board, in its discretion, determines such termination to be at the direction or request of a party to the Change in Control transaction or is otherwise related to such pending Change in Control.

A Covered Termination shall not include termination of employment of the Executive for Cause or by reason of death or Disability, nor a termination of employment by the Executive other than for Good Reason. For purposes of this Agreement, " Disability" shall mean the inability to perform the Executive's duties due to physical or mental illness or impairment continuing for a period of six consecutive months.

(b) Termination For Cause. For purposes of this Agreement, a termination of the Executive's employment by the Company shall be deemed a termination for "Cause" in the event of:

(i) the Executive's repeated failure or refusal to materially perform the Executive's duties to the Company (other than by reason of temporary illness or other excused absence), as such duties existed immediately prior to the Change in Control;

(ii) the Executive's criminal conviction or a plea of nolo contendere with respect to a crime constituting a felony or a crime of moral turpitude; or

(iii) the Executive's engagement in an act of malfeasance, fraud or dishonesty in connection with the Company that materially damages the business or reputation of the Company.

Notwithstanding the foregoing, the Executive's employment shall be considered to have been terminated for Cause only if, prior to such termination for Cause, (1) the Company shall have given to the Executive written notice stating with specificity the reason for the Executive's termination and the provision of this Section 3(b) that is relied upon, and (2) if such reason for termination is item (i) or (iii) above, then a period of 15 days from the giving of such notice shall have elapsed without the Executive's having cured or remedied such reason for termination during such 15-day period, unless such reason for termination cannot be cured or remedied within 15 days, in which case the period for remedy or cure shall be extended for a reasonable time (not to exceed 15 days), provided the Executive has made and continues to make a diligent effort to effect such remedy or cure.

(c) Good Reason. For purposes of this Agreement, the termination of employment by the Executive shall be deemed on account of " Good Reason" in the event of:

(i) any reduction in the Executive's annual base salary amount or annual target bonus percentage from that in effect immediately prior to the Change in Control;

(ii) any reduction or other adverse change in the position, title, duties, responsibilities, level of authority or reporting relationships of the Executive from that in effect immediately prior to the Change in Control, including, without limitation, (a) in the event the Executive is the most senior executive in a particular Company function at the time of the Change in Control, the Executive ceases to be the most senior executive in such function, (b) in the event the Executive performs at the time of the Change in Control external duties typical in a public company, the Executive ceases to perform such duties or (c) any other such reduction attributable to the fact that the Company ceases to be a public company as a result of the Change in Control; or

(iii) a relocation, without the Executive's written consent, of the Executive's principal place of business by more than 35 miles from the Executive's principal place of business immediately prior to the Change in Control.

Notwithstanding the foregoing, the Executive's employment shall be considered to have been terminated on account of Good Reason only if, prior to such termination on account of Good Reason, (1) the Executive shall have given to the Company written notice stating with specificity the reason for the Executive's termination and the provision of this Section 3(c) that is relied upon, and (2) a period of 15 days from the giving of such notice shall have elapsed without the Company's having cured or remedied such reason for termination during such 15-day period, unless such reason for termination cannot be cured or remedied within 15 days, in which case the period for remedy or cure shall be extended for a reasonable time (not to exceed 15 days), provided the Company has made and continues to make a diligent effort to effect such remedy or cure. Unless the Executive shall have provided his written consent, the Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any event or condition constituting Good Reason.

4. Severance Benefits

In the event that the Executive's employment with the Company is terminated during the Protection Period in a manner that constitutes a Covered Termination under Section 3 hereof, the Company shall provide the Executive with the following payments and benefits:

(i) Severance Payment. The Executive shall receive a lump-sum cash severance payment in an amount equal to one time the sum of (A) the Executive's then-current annual base salary amount, plus (B) the greater of (1) the Executive's then-current annual target bonus or other annual target incentive amount or (2) the amount of the annual bonus or other incentive paid or payable to the Executive for the most recently completed fiscal year; determined in each case as provided above without regard to any deductions, withholdings or deferrals of base salary or annual bonus or other incentive and disregarding any reductions in base salary or annual bonus or other incentive that are the basis for a Good Reason termination. The lump-sum severance amount shall be paid by the Company within 15 days following the effective date of the Covered Termination.

(ii) Accrued Rights. The Executive shall receive, within 15 days following the effective date of the Covered Termination, a lump-sum cash payment equal to the sum of (A) the Executive's earned but unpaid base salary through the date of the Covered Termination, (B) any earned but unpaid bonus or other incentive payment for any completed fiscal year prior to the year of the Covered Termination, (C) a pro-rata portion of the Executive's annual target bonus or other annual target incentive for the fiscal year in which the termination occurs, based on the portion of the fiscal year for which the executive was employed and assuming performance under the bonus or other incentive plan at the applicable target levels and (D) any other amounts due to the Executive from the Company as of the date of

the Covered Termination, including any unreimbursed business expenses. The Executive shall also be entitled to all payments and rights under all employee benefit plans, fringe benefit programs and payroll practices of the Company in accordance with their terms.

(iii) Welfare Benefits. The Executive (and the Executive's eligible dependents) shall be entitled to continued medical and dental coverage and benefits under the Company's group benefit plans for a period of 12 months following the Executive's Covered Termination, to be provided on the same terms, and with the same Executive cost-sharing, as active Executives of the Company are provided during this period of continued benefits.

(iv) Equity Rights. All stock options or other equity or equity-based awards that are held by the Executive at the time of the Change in Control that have not previously become vested and (if applicable) exercisable shall, upon the Covered Termination, become immediately and fully vested and exercisable, and any repurchase or similar rights held by the Company or other restrictions on the awards shall lapse, without regard to the terms of any applicable award agreement or plan document, and such awards shall otherwise continue to apply on the same terms.

(v) Indemnification. The Executive shall continue to be entitled, in respect of any period that the Executive served as an officer or director of the Company, and effective until the expiration of all applicable statute of limitations periods, to (i) all indemnification rights provided under any indemnification agreements between the Executive and the Company or provided by the Company's Certificate of Incorporation and By-Laws or otherwise in effect at the time of the Covered Termination and (ii) coverage under any officers' and directors' liability insurance policy in effect at the time of the Covered Termination.

(vi) Perquisites. The Executive shall be entitled to the continuation of all executive perquisites to which the Executive was entitled immediately prior to the date of the Covered Termination for a period of 12 months following the date of such Covered Termination, to be provided on the same terms, and at the same cost to the Executive, as active executives of the Company are provided during this period.

(vii) Outplacement. The Executive shall be provided, at the Company's sole expense, with professional outplacement services consistent with the Executive's duties or profession and of a type and level customary for persons in the Executive's position, as selected by the Company, subject to reasonable limitations established by the Company as to duration and dollar amounts.

5. Parachute Payment Limitation

Notwithstanding anything in this Agreement to the contrary, if it shall be determined that any amount, right or benefit payable by the Company or any other person or entity to or for the Executive's benefit in connection with the Change in Control, whether pursuant to the terms of this Agreement or otherwise (a "Payment"), would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, and if it shall be determined that a reduction of the Payments to a present value that is one dollar less than the minimum present value that would result in the imposition of such excise tax would result in a larger after-tax benefit to Executive than if such reduction had not occurred, then the Payments shall be reduced so as to have a present value that is one dollar less than the minimum present value that would result in the imposition of such excise tax. If the foregoing should result in a reduction in the Payments, the reduction shall be applied first against all cash Payments and then, if necessary, against non-cash Payments in order to satisfy the requirements of this Section 5. All determinations concerning the application of this Section 5 shall be made by a nationally recognized accounting firm to be appointed by the Company. The determinations of the accounting firm shall be conclusive and binding on the parties hereto for all purposes. All fees and expenses of the accounting firm shall be paid by Company.

6. Enforceability

(a) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Company's successors, including any entity that succeeds to the business and interests of Company in connection with or following a Change in Control. This Agreement and all rights hereunder are personal to the Executive and shall not be assignable by the Executive; provided, however, that any amounts that shall have become payable under this Agreement prior to the Executive's death shall inure to the benefit of the Executive's heirs or other legal representatives, as the case may be.

(b) Severability. In the event that any provision of this Agreement is determined to be partially or wholly invalid, illegal or unenforceable, then such provision shall be modified or restricted to the extent necessary to make such provision valid, binding and enforceable, or if such provision cannot be modified or restricted, then such provision shall be deemed to be excised from this Agreement, provided that the binding effect and enforceability of the remaining provisions of this Agreement shall not be affected or impaired in any manner. No waiver by a party of any provisions or conditions of this Agreement shall be deemed a waiver of similar or dissimilar provisions and conditions at the same time or any prior or subsequent time.

(c) Entire Agreement; Amendments. Except as otherwise specifically provided herein, this Agreement constitutes the entire agreement between the parties respecting the subject matter hereof and supersedes any prior agreements respecting severance benefits upon a Change in Control. No amendment to this Agreement shall be deemed valid unless in writing and signed by the parties.

(d) Governing Law. Notwithstanding any conflict of law or choice of law provision to the contrary, this Agreement shall be construed and interpreted according to the laws of the State of California.

7. Dispute Resolution

(a) Arbitration. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration, conducted before a single arbitrator in the State of California, in accordance with the National Rules for Resolution of Employment Disputes of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company shall pay all the costs and expenses of any such arbitration proceeding.

(b) Attorney Fees. In the event that there is any controversy or claim arising out of or relating to this Agreement, or to the interpretation, breach or enforcement thereof, and any arbitration or other proceeding is commenced to enforce the provisions of this Agreement, the Executive shall be entitled to payment of the Executive's reasonable attorney's fees, costs and expenses, except in the event that the arbitrator or other trier of fact determines that the claims of the Executive are frivolous.

8. Miscellaneous

(a) Tax Withholding. All payments required to be made to the Executive under this Agreement shall be subject to withholding of amounts relating to income tax, excise tax, employment tax and other payroll taxes to the extent required to be withheld pursuant to applicable law or regulation.

(b) No Right of Employment. Nothing in this Agreement shall confer upon the Executive any right to continue as an Executive of the Company or interfere in any way with the right of the Company to terminate the Executive's employment at any time, subject to the consequences of a Covered Termination as provided herein.

(c) No Duplication of Benefits. In the event that the Executive is entitled to severance payments or benefits under any other agreement, plan or program of the Company, or by reason of any legal requirement, the severance benefits provided hereunder shall be reduced accordingly to avoid duplication of benefits.

(d) No Mitigation or Offset. The Executive shall be under no obligation to minimize or mitigate damages by seeking substitute employment or otherwise, and the obtaining of any such other employment shall in no event affect any reduction of obligations hereunder for the payments or benefits required to be provided to the Executive. Except as specifically provided herein, the obligations of the Company hereunder shall not be affected by any set-off or counterclaim rights that any party may have against the Executive.

(e) Other Compensation and Benefit Plans. Subject to the provisions of Section 8(c), the rights and benefits of the Executive under this Agreement shall not be in lieu of the Executive's benefits under any compensation or benefit plan or program of the Company, which shall be payable in accordance with the terms and conditions of such plans or programs.

(f) Notices. Any notice required or permitted to be given by this Agreement shall be effective only if in writing, delivered personally or by courier or by facsimile transmission or

sent by express, registered or certified mail, postage prepaid, to the parties at the addresses hereinafter set forth, or at such other places that either party may designate by notice to the other.

Notice to the Company shall be addressed to:

Illumina, Inc.
9885 Towne Centre Drive
San Diego, CA 92121-1975
Attn: Christian G. Cabou,
Senior Vice President
and General Counsel
facsimile: (858) 202-4599

Notice to the Executive shall be addressed to the Executive at the address indicated on the signature page hereof.

(g) Captions and Headings. Captions and paragraph headings are for convenience only, are not a part of this Agreement and shall not be used to construe any provision of this Agreement.

(h) Counterparts. This Agreement may be executed in counterparts, each of which shall constitute an original, but both of which when taken together shall constitute one Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

ILLUMINA, INC.

/s/ Jay T. Flatley
By: Jay T. Flatley
Its: President & Chief Executive Officer
Date: April 10, 2008

EXECUTIVE

/s/ Gregory F. Heath
Name: Gregory F. Heath, Ph.D.
Date: April 14, 2008
Address: _____

EXHIBIT 10.54

ILLUMINA, INC.

CHANGE IN CONTROL
SEVERANCE AGREEMENT

This CHANGE IN CONTROL SEVERANCE AGREEMENT, made as of the date of the last signature shown below (the " Effective Date"), by and between ILLUMINA, INC., a Delaware corporation (the " Company") and Joel McComb (the "Executive").

WHEREAS, the Executive is a key member of the management of the Company, and the Board of Directors of the Company (the "Board") considers it to be in the best interests of the Company and its stockholders to foster the retention of its key management personnel;

WHEREAS, it is expected that from time to time the Board may consider the possibility of a Change in Control of the Company, and the Board recognizes that a Change in Control and the uncertainties that it may raise among management could result in the departure or distraction of management personnel to the detriment of the Company; and

WHEREAS, this Agreement is intended to create an incentive for the Executive to remain in the employ of the Company and to maximize the value of the Company for the benefit of the stockholders in connection with a Change in Control.

NOW, THEREFORE, in consideration of the covenants herein contained and the continued employment of the Executive, the parties hereto agree as follows:

1. Agreement Term

This Agreement shall be effective during the period beginning with the Effective Date and ending on August 21, 2009 (the "Initial End Date"), provided that such period shall be automatically extended for an additional year on each anniversary of the Initial End Date, unless written notice of non-extension is provided by either party to the other party at least 90 days prior to such anniversary (the " Agreement Term").

In the event of a Change in Control occurring during the Agreement Term, the provisions of this Agreement relating to severance rights and benefits of the Executive shall apply with respect to any Covered Termination that occurs during the Protection Period that follows the Change in Control, as provided in Section 3 hereof. The obligations of the Company hereunder with respect to any such Covered Termination shall survive the expiration of the Agreement Term.

2. Change in Control

For purposes of this Agreement, " Change in Control" shall mean the occurrence of one of the following during the Agreement Term:

(a) any merger or consolidation in which the Company shall not be the surviving entity (or survives only as a subsidiary of another entity whose stockholders did not own all or substantially all of the Company's common stock in substantially the same proportions as immediately prior to such transaction);

(b) the sale of all or substantially all of the Company's assets to any other person or entity (other than a wholly-owned subsidiary);

(c) the acquisition of beneficial ownership of a controlling interest (including, without limitation, power to vote) in the outstanding shares of the Company's common stock by any person or entity (including a "group" as defined by or under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended);

(d) a contested election of directors of the Company, as a result of which or in connection with which the persons who were directors before such election or their nominees (the "Incumbent Directors") cease to constitute a majority of the Board; provided, however that if the election, or nomination for election by the Company's stockholders, of any new director was approved by a vote of at least fifty percent (50%) of the Incumbent Directors, such new director shall be considered as an Incumbent Director, or

(e) any other event specified by the Board.

3. Covered Terminations

(a) General. For purposes of this Agreement, "Covered Termination" shall mean the occurrence of one of the following during the period beginning on the date of the event that constitutes a Change in Control and ending on the second anniversary of such date (the " Protection Period"):

(i) termination of employment by the Company other than for " Cause" (as defined in Section 3(b) below); or

(ii) termination of employment by the Executive on account of " Good Reason" (as defined in Section 3(c) below).

In addition, if the Executive is terminated by the Company other than for Cause following the execution of a definitive agreement or the occurrence of such other definitive event which if consummated will result in a Change in Control, but prior to the consummation of the Change in Control, such termination will be deemed a Covered Termination to the extent the Board, in its discretion, determines such termination to be at the direction or request of a party to the Change in Control transaction or is otherwise related to such pending Change in Control.

A Covered Termination shall not include termination of employment of the Executive for Cause or by reason of death or Disability, nor a termination of employment by the Executive other than for Good Reason. For purposes of this Agreement, " Disability" shall mean the inability to perform the Executive's duties due to physical or mental illness or impairment continuing for a period of six consecutive months.

(b) Termination For Cause. For purposes of this Agreement, a termination of the Executive's employment by the Company shall be deemed a termination for "Cause" in the event of:

(i) the Executive's repeated failure or refusal to materially perform the Executive's duties to the Company (other than by reason of temporary illness or other excused absence), as such duties existed immediately prior to the Change in Control;

(ii) the Executive's criminal conviction or a plea of nolo contendere with respect to a crime constituting a felony or a crime of moral turpitude; or

(iii) the Executive's engagement in an act of malfeasance, fraud or dishonesty in connection with the Company that materially damages the business or reputation of the Company.

Notwithstanding the foregoing, the Executive's employment shall be considered to have been terminated for Cause only if, prior to such termination for Cause, (1) the Company shall have given to the Executive written notice stating with specificity the reason for the Executive's termination and the provision of this Section 3(b) that is relied upon, and (2) if such reason for termination is item (i) or (iii) above, then a period of 15 days from the giving of such notice shall have elapsed without the Executive's having cured or remedied such reason for termination during such 15-day period, unless such reason for termination cannot be cured or remedied within 15 days, in which case the period for remedy or cure shall be extended for a reasonable time (not to exceed 15 days), provided the Executive has made and continues to make a diligent effort to effect such remedy or cure.

(c) Good Reason. For purposes of this Agreement, the termination of employment by the Executive shall be deemed on account of " Good Reason" in the event of:

(i) any reduction in the Executive's annual base salary amount or annual target bonus percentage from that in effect immediately prior to the Change in Control;

(ii) any reduction or other adverse change in the position, title, duties, responsibilities, level of authority or reporting relationships of the Executive from that in effect immediately prior to the Change in Control, including, without limitation, (a) in the event the Executive is the most senior executive in a particular Company function at the time of the Change in Control, the Executive ceases to be the most senior executive in such function, (b) in the event the Executive performs at the time of the Change in Control external duties typical in a public company, the Executive ceases to perform such duties or (c) any other such reduction attributable to the fact that the Company ceases to be a public company as a result of the Change in Control; or

(iii) a relocation, without the Executive's written consent, of the Executive's principal place of business by more than 35 miles from the Executive's principal place of business immediately prior to the Change in Control.

Notwithstanding the foregoing, the Executive's employment shall be considered to have been terminated on account of Good Reason only if, prior to such termination on account of Good Reason, (1) the Executive shall have given to the Company written notice stating with specificity the reason for the Executive's termination and the provision of this Section 3(c) that is relied upon, and (2) a period of 15 days from the giving of such notice shall have elapsed without the Company's having cured or remedied such reason for termination during such 15-day period, unless such reason for termination cannot be cured or remedied within 15 days, in which case the period for remedy or cure shall be extended for a reasonable time (not to exceed 15 days), provided the Company has made and continues to make a diligent effort to effect such remedy or cure. Unless the Executive shall have provided his written consent, the Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any event or condition constituting Good Reason.

4. Severance Benefits

In the event that the Executive's employment with the Company is terminated during the Protection Period in a manner that constitutes a Covered Termination under Section 3 hereof, the Company shall provide the Executive with the following payments and benefits:

(i) Severance Payment. The Executive shall receive a lump-sum cash severance payment in an amount equal to one time the sum of (A) the Executive's then-current annual base salary amount, plus (B) the greater of (1) the Executive's then-current annual target bonus or other annual target incentive amount or (2) the amount of the annual bonus or other incentive paid or payable to the Executive for the most recently completed fiscal year; determined in each case as provided above without regard to any deductions, withholdings or deferrals of base salary or annual bonus or other incentive and disregarding any reductions in base salary or annual bonus or other incentive that are the basis for a Good Reason termination. The lump-sum severance amount shall be paid by the Company within 15 days following the effective date of the Covered Termination.

(ii) Accrued Rights. The Executive shall receive, within 15 days following the effective date of the Covered Termination, a lump-sum cash payment equal to the sum of (A) the Executive's earned but unpaid base salary through the date of the Covered Termination, (B) any earned but unpaid bonus or other incentive payment for any completed fiscal year prior to the year of the Covered Termination, (C) a pro-rata portion of the Executive's annual target bonus or other annual target incentive for the fiscal year in which the termination occurs, based on the portion of the fiscal year for which the executive was employed and assuming performance under the bonus or other incentive plan at the applicable target levels and (D) any other amounts due to the Executive from the Company as of the date of

the Covered Termination, including any unreimbursed business expenses. The Executive shall also be entitled to all payments and rights under all employee benefit plans, fringe benefit programs and payroll practices of the Company in accordance with their terms.

(iii) Welfare Benefits. The Executive (and the Executive's eligible dependents) shall be entitled to continued medical and dental coverage and benefits under the Company's group benefit plans for a period of 12 months following the Executive's Covered Termination, to be provided on the same terms, and with the same Executive cost-sharing, as active Executives of the Company are provided during this period of continued benefits.

(iv) Equity Rights. All stock options or other equity or equity-based awards that are held by the Executive at the time of the Change in Control that have not previously become vested and (if applicable) exercisable shall, upon the Covered Termination, become immediately and fully vested and exercisable, and any repurchase or similar rights held by the Company or other restrictions on the awards shall lapse, without regard to the terms of any applicable award agreement or plan document, and such awards shall otherwise continue to apply on the same terms.

(v) Indemnification. The Executive shall continue to be entitled, in respect of any period that the Executive served as an officer or director of the Company, and effective until the expiration of all applicable statute of limitations periods, to (i) all indemnification rights provided under any indemnification agreements between the Executive and the Company or provided by the Company's Certificate of Incorporation and By-Laws or otherwise in effect at the time of the Covered Termination and (ii) coverage under any officers' and directors' liability insurance policy in effect at the time of the Covered Termination.

(vi) Perquisites. The Executive shall be entitled to the continuation of all executive perquisites to which the Executive was entitled immediately prior to the date of the Covered Termination for a period of 12 months following the date of such Covered Termination, to be provided on the same terms, and at the same cost to the Executive, as active executives of the Company are provided during this period.

(vii) Outplacement. The Executive shall be provided, at the Company's sole expense, with professional outplacement services consistent with the Executive's duties or profession and of a type and level customary for persons in the Executive's position, as selected by the Company, subject to reasonable limitations established by the Company as to duration and dollar amounts.

5. Parachute Payment Limitation

Notwithstanding anything in this Agreement to the contrary, if it shall be determined that any amount, right or benefit payable by the Company or any other person or entity to or for the Executive's benefit in connection with the Change in Control, whether pursuant to the terms of this Agreement or otherwise (a "Payment"), would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, and if it shall be determined that a reduction of the Payments to a present value that is one dollar less than the minimum present value that would result in the imposition of such excise tax would result in a larger after-tax benefit to Executive than if such reduction had not occurred, then the Payments shall be reduced so as to have a present value that is one dollar less than the minimum present value that would result in the imposition of such excise tax. If the foregoing should result in a reduction in the Payments, the reduction shall be applied first against all cash Payments and then, if necessary, against non-cash Payments in order to satisfy the requirements of this Section 5. All determinations concerning the application of this Section 5 shall be made by a nationally recognized accounting firm to be appointed by the Company. The determinations of the accounting firm shall be conclusive and binding on the parties hereto for all purposes. All fees and expenses of the accounting firm shall be paid by Company.

6. Enforceability

(a) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Company's successors, including any entity that succeeds to the business and interests of Company in connection with or following a Change in Control. This Agreement and all rights hereunder are personal to the Executive and shall not be assignable by the Executive; provided, however, that any amounts that shall have become payable under this Agreement prior to the Executive's death shall inure to the benefit of the Executive's heirs or other legal representatives, as the case may be.

(b) Severability. In the event that any provision of this Agreement is determined to be partially or wholly invalid, illegal or unenforceable, then such provision shall be modified or restricted to the extent necessary to make such provision valid, binding and enforceable, or if such provision cannot be modified or restricted, then such provision shall be deemed to be excised from this Agreement, provided that the binding effect and enforceability of the remaining provisions of this Agreement shall not be affected or impaired in any manner. No waiver by a party of any provisions or conditions of this Agreement shall be deemed a waiver of similar or dissimilar provisions and conditions at the same time or any prior or subsequent time.

(c) Entire Agreement; Amendments. Except as otherwise specifically provided herein, this Agreement constitutes the entire agreement between the parties respecting the subject matter hereof and supersedes any prior agreements respecting severance benefits upon a Change in Control. No amendment to this Agreement shall be deemed valid unless in writing and signed by the parties.

(d) Governing Law. Notwithstanding any conflict of law or choice of law provision to the contrary, this Agreement shall be construed and interpreted according to the laws of the State of California.

7. Dispute Resolution

(a) Arbitration. Any dispute or controversy arising under or in connection with this Agreement shall be settled exclusively by arbitration, conducted before a single arbitrator in the State of California, in accordance with the National Rules for Resolution of Employment Disputes of the American Arbitration Association then in effect. Judgment may be entered on the arbitrator's award in any court having jurisdiction. The Company shall pay all the costs and expenses of any such arbitration proceeding.

(b) Attorney Fees. In the event that there is any controversy or claim arising out of or relating to this Agreement, or to the interpretation, breach or enforcement thereof, and any arbitration or other proceeding is commenced to enforce the provisions of this Agreement, the Executive shall be entitled to payment of the Executive's reasonable attorney's fees, costs and expenses, except in the event that the arbitrator or other trier of fact determines that the claims of the Executive are frivolous.

8. Miscellaneous

(a) Tax Withholding. All payments required to be made to the Executive under this Agreement shall be subject to withholding of amounts relating to income tax, excise tax, employment tax and other payroll taxes to the extent required to be withheld pursuant to applicable law or regulation.

(b) No Right of Employment. Nothing in this Agreement shall confer upon the Executive any right to continue as an Executive of the Company or interfere in any way with the right of the Company to terminate the Executive's employment at any time, subject to the consequences of a Covered Termination as provided herein.

(c) No Duplication of Benefits. In the event that the Executive is entitled to severance payments or benefits under any other agreement, plan or program of the Company, or by reason of any legal requirement, the severance benefits provided hereunder shall be reduced accordingly to avoid duplication of benefits.

(d) No Mitigation or Offset. The Executive shall be under no obligation to minimize or mitigate damages by seeking substitute employment or otherwise, and the obtaining of any such other employment shall in no event affect any reduction of obligations hereunder for the payments or benefits required to be provided to the Executive. Except as specifically provided herein, the obligations of the Company hereunder shall not be affected by any set-off or counterclaim rights that any party may have against the Executive.

(e) Other Compensation and Benefit Plans. Subject to the provisions of Section 8(c), the rights and benefits of the Executive under this Agreement shall not be in lieu of the Executive's benefits under any compensation or benefit plan or program of the Company, which shall be payable in accordance with the terms and conditions of such plans or programs.

(f) Notices. Any notice required or permitted to be given by this Agreement shall be effective only if in writing, delivered personally or by courier or by facsimile transmission or

sent by express, registered or certified mail, postage prepaid, to the parties at the addresses hereinafter set forth, or at such other places that either party may designate by notice to the other.

Notice to the Company shall be addressed to:

Illumina, Inc.
9885 Towne Centre Drive
San Diego, CA 92121-1975
Attn: Christian G. Cabou,
Senior Vice President
and General Counsel
facsimile: (858) 202-4599

Notice to the Executive shall be addressed to the Executive at the address indicated on the signature page hereof.

(g) Captions and Headings. Captions and paragraph headings are for convenience only, are not a part of this Agreement and shall not be used to construe any provision of this Agreement.

(h) Counterparts. This Agreement may be executed in counterparts, each of which shall constitute an original, but both of which when taken together shall constitute one Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first above written.

ILLUMINA, INC.

/s/ Jay T. Flatley
By: Jay T. Flatley
Its: President & Chief Executive Officer
Date: April 10, 2008

EXECUTIVE

/s/ Joel McComb
Name: Joel McComb
Date: April 14, 2008
Address: _____

EXHIBIT 10.55

INDEMNIFICATION AGREEMENT

THIS AGREEMENT (the "Agreement") is made and entered into by and between Illumina, Inc., a Delaware corporation (the "Company"), and Gregory F. Heath ("Indemnitee"). This Agreement shall be effective as of the date the Indemnitee became a member of the Board of Directors of the Company or an employee of the Company, as applicable (the "Effective Date").

WITNESSETH THAT:

WHEREAS, Indemnitee performs a valuable service for the Company; and

WHEREAS, the Board of Directors of the Company has adopted a Certificate of Incorporation and Bylaws (the "Bylaws") which provide that the Company shall indemnify directors and officers of the Company and that the Company shall have the power to indemnify employees and agents of the Company, in each case to the fullest extent permitted by the Delaware General Corporation Law, as amended ("Delaware Law"); and

WHEREAS, in recognition of Indemnitee's need for protection against personal liability in order to enhance Indemnitee's continued service to the Company in an effective manner, and in part to provide Indemnitee with specific contractual assurance that the indemnification protection provided by the Certificate of Incorporation and By-laws of the Company will be available to Indemnitee (regardless of, among other things, any amendment to or revocation of such Certificate of Incorporation and By-laws or any change in the composition of the Board of Directors of the Company or acquisition transaction relating to the Company), and in order to induce Indemnitee to continue to provide services to the Company as a member of the Board of Directors or as an employee thereof (as applicable), the Company wishes to provide in this Agreement for the indemnification of and the advancing of expenses to Indemnitee to the fullest extent (whether partial or complete) permitted by law and as set forth in this Agreement, and, to the extent insurance is maintained, for the continued coverage of Indemnitee under the Company's liability insurance policies; and

WHEREAS, in order to induce Indemnitee to provide or continue to provide services to the Company, the Company has determined and agreed to enter into this Agreement with Indemnitee, which shall be effective as of the Effective Date;

NOW, THEREFORE, in view of the considerations set forth above the Company and Indemnitee hereby agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent authorized or permitted by the provisions of the Delaware Law, as such may be amended from time to time, and Article VII of the Certificate of

Incorporation and Sections 6.1 and 6.2 of the Bylaws, as such Certificate of Incorporation and Bylaws are in effect on the date hereof and as such may be amended from time to time to enhance the rights of Indemnitee. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Company . Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of Indemnitee's Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Company . Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of Indemnitee's Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful . Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, Indemnitee shall be indemnified to the maximum extent permitted by law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

2. Contribution in the Event of Joint Liability.

(a) Whether or not the indemnification provided in Section 1 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement of such action, suit or proceeding actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which the Delaware Law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(b) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

3. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

4. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within ten (10) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by an undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 4 shall be unsecured and interest free. Notwithstanding the foregoing, the obligation of the Company to advance Expenses pursuant to this Section 4 shall be subject to the condition that, if, when and to the extent that the Company determines that Indemnitee would not be permitted to be indemnified under applicable law, the Company shall be entitled to be reimbursed, within twenty (20) days of such determination, by Indemnitee (who hereby agrees to reimburse the Company) for all such amounts theretofore paid; provided, however, that if Indemnitee has commenced or thereafter commences legal

proceedings in a court of competent jurisdiction to secure a determination that Indemnitee should be indemnified under applicable law, any determination made by the Company that Indemnitee would not be permitted to be indemnified under applicable law shall not be binding and Indemnitee shall not be required to reimburse the Company for any advance of Expenses until a final judicial determination is made with respect thereto (and as to which all rights of appeal therefrom have been exhausted or lapsed).

5. Procedures and Presumptions for Determination of Entitlement to Indemnification . It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the Delaware Law and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification (including, but not limited to, the advancement of Expenses and contribution by the Company) under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board of Directors in writing that Indemnitee has requested indemnification.

(b) In the event the Company shall be obligated hereunder to pay the Expenses of any Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same Proceeding; provided that, (i) Indemnitee shall have the right to employ Indemnitee's counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense, or (C) the Company shall not continue to retain such counsel to defend such Proceeding, then the fees and expenses of Indemnitee counsel shall be at the expense of the Company. The Company shall have the right to conduct such defense as it sees fit in its sole discretion; provided, however, the Company shall not, without the prior written consent of Indemnitee, consent to the entry of any judgment against Indemnitee or enter into any settlement or compromise which (i) includes an admission of fault of Indemnitee or (ii) does not include, as an unconditional term thereof, the full release of Indemnitee from all liability in respect of such Proceeding, which release shall be in form and substance reasonably satisfactory to Indemnitee.

(c) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 5(a) hereof, a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following three methods, which shall be at the election of Indemnitee: (1) by a majority vote of

the Disinterested Directors, even though less than a quorum, (2) by independent legal counsel in a written opinion or (3) by the stockholders.

(d) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 5(c) hereof, the Independent Counsel shall be selected as provided in this Section 5(d). The Independent Counsel shall be selected by the Board of Directors and approved by Indemnitee. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 14 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 5(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 5(c) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 5(c) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 5(d), regardless of the manner in which such Independent Counsel was selected or appointed.

(e) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise (as hereinafter defined) in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 5(f) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this

presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(g) If the person, persons or entity empowered or selected under Section 5 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within thirty (30) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 30-day period may be extended for a reasonable time, not to exceed an additional fifteen (15) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 5(g) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 5(c) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board of Directors or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(h) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board of Directors or stockholder of the Company shall act reasonably and in good faith in making a determination regarding Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(i) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

6. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 5 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 4 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 5(c) of this Agreement within 90 days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within twenty (20) days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 5 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 6(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 5(c) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 6 shall be conducted in all respects as a *de novo* trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 5(c).

(c) If a determination shall have been made pursuant to Section 5(c) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 6, absent a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 6, seeks a judicial adjudication of Indemnitee's rights under, or to recover damages for breach of, this Agreement, the Company shall pay on Indemnitee's behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 14 of this Agreement) actually and reasonably incurred by Indemnitee in such judicial adjudication, only if Indemnitee ultimately is determined to be entitled to such indemnification or advancement of expenses; provided, however, if it shall be determined in such judicial adjudication that Indemnitee is entitled to receive part but not all of the indemnification or advancement of expenses sought, the expenses incurred by Indemnitee in connection with such judicial adjudication or arbitration shall be appropriately pro-rated.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 6 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement.

(f) Both the Company and Indemnitee acknowledge that in certain instances, federal law or applicable public policy may prohibit the Company from indemnifying

its directors, officers, employees or agents under this Agreement or otherwise. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the Securities and Exchange Commission to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

7. Liability Insurance. To the extent the Company maintains liability insurance applicable to directors, officers, employees, agents or fiduciaries, Indemnitee shall be covered by such policies in such a manner as to provide Indemnitee the same rights and benefits as are provided to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, agents or fiduciaries, if Indemnitee is not a director or officer but is a key employee, agent or fiduciary.

8. Exceptions. Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) Excluded Action or Omissions. To indemnify Indemnitee for Indemnitee's acts, omissions or transactions from which Indemnitee may not be relieved of liability under applicable law;

(b) Proceedings Initiated by Indemnitee. To indemnify or advance expenses to Indemnitee with respect to Proceedings initiated or brought voluntarily by Indemnitee and not by way of defense, except (i) with respect to actions or proceedings brought to establish or enforce a right to indemnification under this Agreement or any other agreement or insurance policy or under the Company's Certificate of Incorporation or Bylaws now or hereafter in effect relating to Proceedings, (ii) in specific cases if the Board of Directors has approved the initiation or bringing of such Proceeding, or (iii) as otherwise required under Section 145 of the Delaware General Corporation Law, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advance expense payment or insurance recovery, as the case may be;

(c) Lack of Good Faith. To indemnify Indemnitee for any expenses incurred by Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction ultimately determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous; or

(d) Claims Under Section 16(b). To indemnify Indemnitee for expenses and the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended, or any similar successor statute.

9. Non-Exclusivity; Survival of Rights; Insurance; Subrogation.

(a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation of the Company, the Bylaws, any

agreement, a vote of stockholders, a resolution of directors or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in Indemnitee's Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the Delaware Law, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies.

(c) In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(d) The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(e) No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against Indemnitee, Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of two (2) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such two-year period; provided, however, that if any shorter period of limitations is otherwise applicable to any such cause of action, such shorter period shall govern.

10. Exception to Right of Indemnification. Notwithstanding any other provision of this Agreement, Indemnitee shall not be entitled to indemnification under this Agreement with respect to any Proceeding brought by Indemnitee, or any claim therein, unless (a) the bringing of such Proceeding or making of such claim shall have been approved by the Board of Directors of the Company or (b) such Proceeding is being brought by Indemnitee to assert, interpret or enforce Indemnitee's rights under this Agreement.

11. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is a director, officer, employee or agent of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 6 hereof) by reason of Indemnitee's Corporate Status, whether or not Indemnitee is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement.

12. Security. To the extent requested by Indemnitee and approved by the Board of Directors of the Company, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of Indemnitee, which consent may not be unreasonably withheld.

13. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as a director, officer, employee or agent or of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director, officer, employee or agent of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

14. Definitions. For purposes of this Agreement:

(a) "Corporate Status" describes the status, either prior or subsequent to the date of this agreement, of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(b) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) "Enterprise" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) "Expenses" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs,

printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding.

(e) "Independent Counsel" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past three (3) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) "Proceeding" includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, by reason of any action taken by Indemnitee or of any inaction on Indemnitee's part while acting as a director, officer, employee or agent of the Company, or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise; in each case whether or not Indemnitee is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 6 of this Agreement to enforce Indemnitee's rights under this Agreement.

15. Severability. If any provision or provisions of this Agreement shall be held by a court of competent jurisdiction to be invalid, void, illegal or otherwise unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable

law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

16. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

17. Notice By Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

18. Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, or (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed:

(a) If to Indemnitee, to the address set forth below Indemnitee signature hereto.

(b) If to the Company, to:

Illumina, Inc.
9885 Towne Centre Drive
San Diego, California 92121
Attn: President

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

19. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

20. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

21. Governing Law. The parties agree that this Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware without application of the conflict of laws principles thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

ILLUMINA, INC.

/s/ Jay T. Flatley
By: Jay T. Flatley
Its: President & Chief Executive Officer
Date: June 23, 2008

INDEMNITEE

/s/ Gregory F. Heath
Name: Gregory F. Heath
Date: June 24, 2008
Address: _____

EXHIBIT 10.56

INDEMNIFICATION AGREEMENT

THIS AGREEMENT (the "Agreement") is made and entered into by and between Illumina, Inc., a Delaware corporation (the "Company"), and Joel McComb ("Indemnitee"). This Agreement shall be effective as of the date the Indemnitee became a member of the Board of Directors of the Company or an employee of the Company, as applicable (the "Effective Date").

WITNESSETH THAT:

WHEREAS, Indemnitee performs a valuable service for the Company; and

WHEREAS, the Board of Directors of the Company has adopted a Certificate of Incorporation and Bylaws (the "Bylaws") which provide that the Company shall indemnify directors and officers of the Company and that the Company shall have the power to indemnify employees and agents of the Company, in each case to the fullest extent permitted by the Delaware General Corporation Law, as amended ("Delaware Law"); and

WHEREAS, in recognition of Indemnitee's need for protection against personal liability in order to enhance Indemnitee's continued service to the Company in an effective manner, and in part to provide Indemnitee with specific contractual assurance that the indemnification protection provided by the Certificate of Incorporation and By-laws of the Company will be available to Indemnitee (regardless of, among other things, any amendment to or revocation of such Certificate of Incorporation and By-laws or any change in the composition of the Board of Directors of the Company or acquisition transaction relating to the Company), and in order to induce Indemnitee to continue to provide services to the Company as a member of the Board of Directors or as an employee thereof (as applicable), the Company wishes to provide in this Agreement for the indemnification of and the advancing of expenses to Indemnitee to the fullest extent (whether partial or complete) permitted by law and as set forth in this Agreement, and, to the extent insurance is maintained, for the continued coverage of Indemnitee under the Company's liability insurance policies; and

WHEREAS, in order to induce Indemnitee to provide or continue to provide services to the Company, the Company has determined and agreed to enter into this Agreement with Indemnitee, which shall be effective as of the Effective Date;

NOW, THEREFORE, in view of the considerations set forth above the Company and Indemnitee hereby agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent authorized or permitted by the provisions of the Delaware Law, as such may be amended from time to time, and Article VII of the Certificate of

Incorporation and Sections 6.1 and 6.2 of the Bylaws, as such Certificate of Incorporation and Bylaws are in effect on the date hereof and as such may be amended from time to time to enhance the rights of Indemnitee. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) Proceedings Other Than Proceedings by or in the Right of the Company . Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of Indemnitee's Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful.

(b) Proceedings by or in the Right of the Company . Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of Indemnitee's Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful . Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, Indemnitee shall be indemnified to the maximum extent permitted by law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

2. Contribution in the Event of Joint Liability.

(a) Whether or not the indemnification provided in Section 1 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement of such action, suit or proceeding actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which the Delaware Law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(b) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

3. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

4. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within ten (10) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by an undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 4 shall be unsecured and interest free. Notwithstanding the foregoing, the obligation of the Company to advance Expenses pursuant to this Section 4 shall be subject to the condition that, if, when and to the extent that the Company determines that Indemnitee would not be permitted to be indemnified under applicable law, the Company shall be entitled to be reimbursed, within twenty (20) days of such determination, by Indemnitee (who hereby agrees to reimburse the Company) for all such amounts theretofore paid; provided, however, that if Indemnitee has commenced or thereafter commences legal

proceedings in a court of competent jurisdiction to secure a determination that Indemnitee should be indemnified under applicable law, any determination made by the Company that Indemnitee would not be permitted to be indemnified under applicable law shall not be binding and Indemnitee shall not be required to reimburse the Company for any advance of Expenses until a final judicial determination is made with respect thereto (and as to which all rights of appeal therefrom have been exhausted or lapsed).

5. Procedures and Presumptions for Determination of Entitlement to Indemnification . It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the Delaware Law and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification (including, but not limited to, the advancement of Expenses and contribution by the Company) under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board of Directors in writing that Indemnitee has requested indemnification.

(b) In the event the Company shall be obligated hereunder to pay the Expenses of any Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same Proceeding; provided that, (i) Indemnitee shall have the right to employ Indemnitee's counsel in any such Proceeding at Indemnitee's expense and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense, or (C) the Company shall not continue to retain such counsel to defend such Proceeding, then the fees and expenses of Indemnitee counsel shall be at the expense of the Company. The Company shall have the right to conduct such defense as it sees fit in its sole discretion; provided, however, the Company shall not, without the prior written consent of Indemnitee, consent to the entry of any judgment against Indemnitee or enter into any settlement or compromise which (i) includes an admission of fault of Indemnitee or (ii) does not include, as an unconditional term thereof, the full release of Indemnitee from all liability in respect of such Proceeding, which release shall be in form and substance reasonably satisfactory to Indemnitee.

(c) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 5(a) hereof, a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following three methods, which shall be at the election of Indemnitee: (1) by a majority vote of

the Disinterested Directors, even though less than a quorum, (2) by independent legal counsel in a written opinion or (3) by the stockholders.

(d) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 5(c) hereof, the Independent Counsel shall be selected as provided in this Section 5(d). The Independent Counsel shall be selected by the Board of Directors and approved by Indemnitee. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 14 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 5(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 5(c) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 5(c) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 5(d), regardless of the manner in which such Independent Counsel was selected or appointed.

(e) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise (as hereinafter defined) in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 5(f) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this

presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(g) If the person, persons or entity empowered or selected under Section 5 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within thirty (30) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 30-day period may be extended for a reasonable time, not to exceed an additional fifteen (15) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 5(g) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 5(c) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board of Directors or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(h) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board of Directors or stockholder of the Company shall act reasonably and in good faith in making a determination regarding Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(i) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

6. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 5 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 4 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 5(c) of this Agreement within 90 days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within twenty (20) days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 5 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 6(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 5(c) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 6 shall be conducted in all respects as a *de novo* trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 5(c).

(c) If a determination shall have been made pursuant to Section 5(c) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 6, absent a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 6, seeks a judicial adjudication of Indemnitee's rights under, or to recover damages for breach of, this Agreement, the Company shall pay on Indemnitee's behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 14 of this Agreement) actually and reasonably incurred by Indemnitee in such judicial adjudication, only if Indemnitee ultimately is determined to be entitled to such indemnification or advancement of expenses; provided, however, if it shall be determined in such judicial adjudication that Indemnitee is entitled to receive part but not all of the indemnification or advancement of expenses sought, the expenses incurred by Indemnitee in connection with such judicial adjudication or arbitration shall be appropriately pro-rated.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 6 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement.

(f) Both the Company and Indemnitee acknowledge that in certain instances, federal law or applicable public policy may prohibit the Company from indemnifying

its directors, officers, employees or agents under this Agreement or otherwise. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the Securities and Exchange Commission to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

7. Liability Insurance. To the extent the Company maintains liability insurance applicable to directors, officers, employees, agents or fiduciaries, Indemnitee shall be covered by such policies in such a manner as to provide Indemnitee the same rights and benefits as are provided to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, agents or fiduciaries, if Indemnitee is not a director or officer but is a key employee, agent or fiduciary.

8. Exceptions. Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) Excluded Action or Omissions. To indemnify Indemnitee for Indemnitee's acts, omissions or transactions from which Indemnitee may not be relieved of liability under applicable law;

(b) Proceedings Initiated by Indemnitee. To indemnify or advance expenses to Indemnitee with respect to Proceedings initiated or brought voluntarily by Indemnitee and not by way of defense, except (i) with respect to actions or proceedings brought to establish or enforce a right to indemnification under this Agreement or any other agreement or insurance policy or under the Company's Certificate of Incorporation or Bylaws now or hereafter in effect relating to Proceedings, (ii) in specific cases if the Board of Directors has approved the initiation or bringing of such Proceeding, or (iii) as otherwise required under Section 145 of the Delaware General Corporation Law, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advance expense payment or insurance recovery, as the case may be;

(c) Lack of Good Faith. To indemnify Indemnitee for any expenses incurred by Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction ultimately determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous; or

(d) Claims Under Section 16(b). To indemnify Indemnitee for expenses and the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended, or any similar successor statute.

9. Non-Exclusivity; Survival of Rights; Insurance; Subrogation.

(a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation of the Company, the Bylaws, any

agreement, a vote of stockholders, a resolution of directors or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in Indemnitee's Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the Delaware Law, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies.

(c) In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(d) The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(e) No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against Indemnitee, Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of two (2) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such two-year period; provided, however, that if any shorter period of limitations is otherwise applicable to any such cause of action, such shorter period shall govern.

10. Exception to Right of Indemnification. Notwithstanding any other provision of this Agreement, Indemnitee shall not be entitled to indemnification under this Agreement with respect to any Proceeding brought by Indemnitee, or any claim therein, unless (a) the bringing of such Proceeding or making of such claim shall have been approved by the Board of Directors of the Company or (b) such Proceeding is being brought by Indemnitee to assert, interpret or enforce Indemnitee's rights under this Agreement.

11. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is a director, officer, employee or agent of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 6 hereof) by reason of Indemnitee's Corporate Status, whether or not Indemnitee is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement.

12. Security. To the extent requested by Indemnitee and approved by the Board of Directors of the Company, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of Indemnitee, which consent may not be unreasonably withheld.

13. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as a director, officer, employee or agent or of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director, officer, employee or agent of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

14. Definitions. For purposes of this Agreement:

(a) "Corporate Status" describes the status, either prior or subsequent to the date of this agreement, of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(b) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) "Enterprise" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) "Expenses" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs,

printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding.

(e) "Independent Counsel" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past three (3) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) "Proceeding" includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, by reason of any action taken by Indemnitee or of any inaction on Indemnitee's part while acting as a director, officer, employee or agent of the Company, or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise; in each case whether or not Indemnitee is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 6 of this Agreement to enforce Indemnitee's rights under this Agreement.

15. Severability. If any provision or provisions of this Agreement shall be held by a court of competent jurisdiction to be invalid, void, illegal or otherwise unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable

law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

16. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

17. Notice By Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

18. Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, or (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed:

(a) If to Indemnitee, to the address set forth below Indemnitee signature hereto.

(b) If to the Company, to:

Illumina, Inc.
9885 Towne Centre Drive
San Diego, California 92121
Attn: President

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

19. Identical Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

20. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

21. Governing Law. The parties agree that this Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware without application of the conflict of laws principles thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

ILLUMINA, INC.

/s/ Jay T. Flatley

By: Jay T. Flatley
Its: President & Chief Executive Officer
Date: June 23, 2008

INDEMNITEE

/s/ Joel McComb

Name: Joel McComb
Date: June 23, 2008
Address: _____

Exhibit 31.1

CERTIFICATION OF JAY T. FLATLEY PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jay T. Flatley, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Illumina, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: July 25, 2008

/s/ JAY T. FLATLEY
Jay T. Flatley
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHRISTIAN O. HENRY PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christian O. Henry, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Illumina, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: July 25, 2008

/s/ CHRISTIAN O. HENRY
Christian O. Henry
Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF JAY T. FLATLEY PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Illumina, Inc. (the "Company") on Form 10-Q for the three and six months ended June 29, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jay T. Flatley, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: July 25, 2008

By: /s/ JAY T. FLATLEY
Jay T. Flatley
President and Chief Executive Officer

This certification accompanying the Report is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities such Section, and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before, on or after the date of the Report), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

CERTIFICATION OF CHRISTIAN O. HENRY PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Illumina, Inc. (the "Company") on Form 10-Q for the three and six months ended June 29, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christian O. Henry, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: July 25, 2008

By: /s/ CHRISTIAN O. HENRY
Christian O. Henry
Senior Vice President and Chief Financial Officer

This certification accompanying the Report is not deemed filed with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities such Section, and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before, on or after the date of the Report), irrespective of any general incorporation language contained in such filing.