

ILLUMINA INC  
Form 10-K  
February 14, 2017  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended January 1, 2017

or

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: 001-35406

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.)

5200 Illumina Way 92122  
San Diego, California

(Address of principal executive offices) (Zip Code)

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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
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Common Stock, \$0.01 par value	The NASDAQ Global Select Market
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Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

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 has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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  Smaller reporting company

(Do not check if a 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 February 3, 2017, there were 146.3 million shares (excluding 42.6 million shares held in treasury) of the registrant's common stock outstanding. The aggregate market value of the common stock held by non-affiliates of the registrant as of July 3, 2016 (the last business day of the registrant's most recently completed second fiscal quarter), based on the closing price for the common stock on The NASDAQ Global Select Market on July 1, 2016 (the last trading day before July 3, 2016), was \$17.9 billion. This amount excludes an aggregate of approximately 19.4 million shares of common stock held by officers and directors and each person known by the registrant to own 10% or more of the outstanding common stock. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, directly or indirectly, to direct or cause the direction of the management or policies of the registrant, or that the registrant is controlled by or under common control with such person.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement for the 2017 annual meeting of stockholders are incorporated by reference into Items 10 through 14 of Part III of this Report.

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### Special Note Regarding Forward-Looking Statements

This annual report on Form 10-K contains, and our officers and representatives may from time to time make, “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as: “anticipate,” “intend,” “plan,” “goal,” “seek,” “believe,” “project,” “estimate,” “expect,” “strategy,” “future,” “likely,” “may,” “should,” “will,” or the negative of the similar references to future periods. Examples of forward-looking statements include, among others, statements we make regarding:

- our expectations as to our future financial performance, results of operations, or other operational results or metrics; the benefits that we expect will result from our business activities and certain transactions we have completed, such as product introductions, increased revenue, decreased expenses, and avoided expenses and expenditures;
- our expectations of the effect on our financial condition of claims, litigation, contingent liabilities, and governmental investigations, proceedings, and regulations;

- our strategies or expectations for product development, market position, financial results, and reserves; and
- other expectations, beliefs, plans, strategies, anticipated developments, and other matters that are not historical facts.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy, and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the following:

- our ability to develop and commercialize our instruments and consumables, to deploy new products, services, and applications, and to expand the markets for our technology platforms;
- our ability to manufacture robust instrumentation and consumables;
- our ability to identify and integrate acquired technologies, products, or businesses successfully;
- our expectations and beliefs regarding prospects and growth for the business and its markets;
- the assumptions underlying our critical accounting policies and estimates;
- our assessments and estimates that determine our effective tax rate;
- our assessments and beliefs regarding the outcome of pending legal proceedings and any liability, that we may incur as a result of those proceedings;
- uncertainty, or adverse economic and business conditions, including as a result of slowing or uncertain economic growth in the United States or worldwide; and
- other factors detailed in our filings with the SEC, including the risks, uncertainties, and assumptions described in Item 1A “Risk Factors” below, or in information disclosed in public conference calls, the date and time of which are released beforehand.

Any forward-looking statement made by us in this annual report on Form 10-K is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation, and do not intend, to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, or to review or confirm analysts’ expectations, or to provide interim reports or updates on the progress of any current financial quarter, in each case whether as a result of new information, future developments, or otherwise.

#### Available Information

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports are available free of charge on our website, [www.illumina.com](http://www.illumina.com). The information on our website is not incorporated by reference into this report. Such reports are made available as soon as reasonably practicable after filing with, or furnishing to, the SEC. The SEC also maintains an Internet site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that electronically file with the SEC. Copies of our annual report on Form 10-K will be made available, free of charge, upon written request.

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Illumina®, 24sure®, BaseSpace®, BeadArray, BlueFish®, BlueFuse®, BlueGnome®, cBot, CSPro®, DASL®, DesignStudio, Epicentre®, ForenSeq, Genetic Energy®, GenomeStudio®, GoldenGate®, HiScan®, HiSeq®, HiSeq X®, Infinium®, iScan®, iSelect®, MiniSeq, MiSeq®, MiSeqDx®, MiSeq FGx, NeoPrep, NextBio®, Nextera®, NextSeq®, NovaSeq, SeqMonitor, TruGenome®, TruSeq®, TruSight®, Understand Your Genome®, UYG®, VeraCode®, verifi®, VeriSeq, the pumpkin orange color, and the Genetic Energy streaming bases design are certain of our trademarks. This report also contains brand names, trademarks, or service marks of companies other than Illumina, and these brand names, trademarks, and service marks are the property of their respective holders.

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Unless the context requires otherwise, references in this annual report on Form 10-K to “Illumina,” the “Company,” “we,” “us,” and “our” refer to Illumina, Inc. and its subsidiaries.

## PART I

### ITEM 1. Business.

#### Overview

We are the global leader in sequencing- and array-based solutions for genetic analysis. Our products and services serve customers in a wide range of markets, enabling the adoption of genomic solutions in research and clinical settings. We were incorporated in California in April 1998 and reincorporated in Delaware in July 2000. Our principal executive offices are located at 5200 Illumina Way, San Diego, California 92122. Our telephone number is (858) 202-4500.

Our customers include leading genomic research centers, academic institutions, government laboratories, and hospitals, as well as pharmaceutical, biotechnology, agrigenomics, commercial molecular diagnostic laboratories, and consumer genomics companies.

Our portfolio of integrated systems, consumables, and analysis tools is designed to accelerate and simplify genetic analysis. This portfolio addresses the range of genomic complexity, price points, and throughput, enabling customers to select the best solution for their research or clinical challenge.

Over the past five years, we have made key acquisitions to provide our customers with more comprehensive sample-to-answer solutions and to enable our goal of becoming a leader in the clinical market. These include:

• **GenoLogics Life Sciences Software Inc.**, a developer of industry-leading laboratory information management systems, in August 2015;

• **Myraqa, Inc.**, a regulatory and quality consulting firm specializing in IVDs and companion diagnostics, in July 2014;

• **NextBio**, a provider of clinical and genomic informatics, in November 2013;

• **Advanced Liquid Logic Inc.**, a developer of digital microfluidics and liquid handling solutions, in July 2013;

• **Verinata Health, Inc.**, a provider of non-invasive tests for the early identification of fetal chromosomal abnormalities, in February 2013; and

• **BlueGnome Ltd.**, a provider of cytogenetics and in vitro fertilization screening solutions, in September 2012.

We also invest in early-stage companies that are pursuing promising genomics-related technologies. For example, **GRAIL, Inc. (GRAIL)**, formed in January 2016, was created to develop a blood test for early-stage cancer detection, and **Helix Holdings I, LLC (Helix)** was established in 2015 to enable individuals to explore their genetic information by providing sequencing and services for consumers through third-party partners. GRAIL and Helix are consolidated variable interest entities.

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### Genetics Primer

The instruction set for all living cells is encoded in deoxyribonucleic acid, or DNA. The complete set of DNA for any organism is referred to as its genome. DNA contains small regions called genes, which comprise a string of nucleotide bases labeled A, C, G, and T, representing adenine, cytosine, guanine, and thymine, respectively. These nucleotide bases occur in a precise order known as the DNA sequence. When a gene is “expressed,” a partial copy of its DNA sequence called messenger RNA (mRNA) is used as a template to direct the synthesis of a particular protein. Proteins, in turn, direct all cellular function. The illustration below is a simplified gene expression schematic.

Variations among organisms are due, in large part, to differences in their DNA sequences. Changes can result from insertions, deletions, inversions, translocations, or duplications of nucleotide bases. These changes may result in certain genes becoming over-expressed (excessive protein production), under-expressed (reduced protein production), or silenced altogether, sometimes triggering changes in cellular function. These changes can be the result of heredity, but most often they occur at random. The most common form of variation in humans is called a single nucleotide polymorphism (SNP), which is a base change in a single position in a DNA sequence. Another type of variation, copy number variations (CNVs), occur when there are fewer or more copies of certain genes, segments of a gene, or stretches of DNA.

In humans, genetic variation accounts for many of the physical differences we see (e.g., height, hair, eye color, etc.). Genetic variations also can have medical consequences affecting disease susceptibility, including predisposition to complex genetic diseases such as cancer, diabetes, cardiovascular disease, and Alzheimer’s disease. They can affect individual response to certain drug treatments, causing patients to experience adverse side effects, or to respond well or not at all.

Scientists are studying these variations and their consequences in humans, as well as in a broad range of animals, plants, and microorganisms. Such research takes place in government, university, pharmaceutical, biotechnology, and agrigenomics laboratories around the world, where scientists expand our knowledge of the biological functions essential for life. Beginning at the genetic level, Illumina tools are used to elucidate the correlation between gene sequence and biological processes. Life-science research includes the study of the cells, tissues, organs, systems, and other components of living organisms. This research supports the development of new treatments to improve human health. Examples include more tailored clinical treatments, often referred to as precision medicine, as well as advances in agriculture and animal husbandry to meet growing needs for food and energy. Researchers who investigate human, viral, and bacterial genetic variation to understand the mechanisms of disease are enabling the development of more effective diagnostics and therapeutics. They also provide greater insight into genetic variation in plants (e.g., food and biofuel crops) and animals (e.g., livestock and domestic), enabling improvements in crop yields and animal breeding programs.

By empowering genetic analysis and facilitating a deeper understanding of genetic variation and function, our tools advance disease research, drug development, and the creation of molecular diagnostic tests. We believe that this will trigger a fundamental shift in the practice of medicine and health care and that the increased emphasis on preventive and predictive molecular medicine will usher in the era of precision health care.

### Our Principal Markets

Our organization is structured to target the markets and customers outlined below.

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### Life Sciences

Historically, our core business has been in the life sciences research market. This includes laboratories associated with universities, research centers, and government institutions, along with biotechnology and pharmaceutical companies. Researchers at these institutions use our products and services for basic and translational research across a spectrum of scientific applications, including targeted, exome, and whole-genome sequencing; genetic variation; gene expression; epigenetics; and metagenomics. Next-generation sequencing (NGS) technologies are being adopted due to their declining costs per sample as well as their ability to sequence large sample sizes and generate vast amounts of data. Both private and public funding drive this research, along with global initiatives to characterize genetic variation.

We also serve applied markets including consumer genomics, agrigenomics, forensic genomics, and transplant biology. In consumer genomics, our customers use our technologies to provide personalized genetic data and analysis to individual consumers. In agrigenomics, government and corporate researchers use our products and services to explore the genetic and biological basis for productivity and nutritional constitution in crops and livestock. Researchers can identify natural and novel genomic variation and deploy genome-wide marker-based applications to accelerate breeding and production of healthier and higher-yielding crops and livestock. In forensic genomics, major law enforcement agencies use genomic information to investigate criminal cases, as do military and security intelligence agencies. In transplant diagnostics, we offer a sample-to-answer solution to perform high resolution HLA typing in a single assay, which enables users to determine how closely the tissues of one person match the tissues of another person.

### Clinical Genomics

We provide sample-to-answer solutions to our customers in two key areas of translational and clinical genomics: reproductive and genetic health, and oncology.

Illumina provides reproductive-health solutions, including noninvasive prenatal testing (NIPT), preimplantation genetic screening and diagnosis (PGS and PGD), and neonatal and genetic health testing. Our technology enables NIPT for early identification of fetal chromosomal abnormalities by analyzing cell-free DNA in maternal blood. Our PGS solution is used with in vitro fertilization (IVF) to determine, before implantation, whether an embryo has an abnormal number of chromosomes, which is a major cause of IVF failure and miscarriages. In the case of PGD, the technology determines which embryos are free from gene variants associated with genetic diseases.

Cancer is a disease of the genome, and the goal of cancer genomics is to identify genomic changes that transform a normal cell into a cancerous one. Understanding these genomic changes improves diagnostic accuracy, increases understanding of the prognosis, and enables oncologists to target therapies to individuals. Customers in the translational and clinical oncology markets use our products to perform research that may help identify individuals who are genetically predisposed to cancer. Customers also utilize our technology to identify the molecular changes in a tumor so that physicians can tailor treatment based on the genetic variation. We believe that circulating tumor DNA (ctDNA) will become an important clinical tool for managing oncology patients during all stages of tumor progression. Our technology is being used to research the implications of ctDNA in treatment determination, treatment monitoring, minimal residual disease, and asymptomatic screening. For example, we have invested in GRAIL, which was formed to develop a blood-based test for early-stage cancer detection, and has been enabled by our sequencing technology.

To advance genomic-based precision oncology care, we are working with key opinion leaders to set standards for NGS-based assays in routine clinical oncology practice and to define regulatory frameworks for this new testing paradigm.



## Our Principal Products and Technologies

Our unique technology platforms support the scale of experimentation necessary for population-scale studies, genome-wide discovery, target selection, and validation studies (see Figure 1 below). Customers use our products to analyze the genome at all levels of complexity, from whole-genome sequencing to targeted panels. A large and dynamic Illumina user community has published tens of thousands of customer-authored scientific papers using our technologies. Through rapid innovation, we are changing the economics of genetic research, enabling projects that were previously considered impossible, and supporting clinical advances towards precision medicine.

Most of our product sales consist of instruments and consumables (which include reagents, flow cells, and microarrays) based on our proprietary technologies. For the fiscal years ended January 1, 2017, January 3, 2016, and December 28, 2014, instrument sales comprised 20%, 27%, and 30%, respectively, of total revenues, and consumable sales represented 64%, 58%, and 56%, respectively, of total revenues.

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Figure 1: Illumina Platform Overview:  
Sequencing

DNA sequencing is the process of determining the order of nucleotide bases (A, C, G, or T) in a DNA sample. Our portfolio of sequencing platforms represents a family of systems that we believe set the standard for productivity, cost-effectiveness, and accuracy among NGS technologies. Customers use our platforms to perform whole-genome, de novo, exome and RNA sequencing, and targeted resequencing of specific gene regions and genes.

Whole-genome sequencing determines the complete DNA sequence of an organism. In de novo sequencing, the goal is to sequence and analyze a sample without using information from prior sequencing of that species. In targeted resequencing, a portion of the sequence of an organism is compared to a standard or reference sequence from previously sequenced samples to identify genetic variation. Understanding the similarities and differences in DNA sequence between and within species helps us understand the function of the structures encoded in the DNA.

Our DNA sequencing technology is based on our proprietary reversible terminator-based sequencing chemistry, referred to as sequencing by synthesis (SBS) biochemistry. SBS tracks the addition of labeled nucleotides as the DNA chain is copied in a massively parallel fashion. Our SBS sequencing technology provides researchers with a broad range of applications and the ability to sequence even large mammalian genomes in a few days rather than weeks or years.

Our sequencing platforms can generate between 500 megabases (Mb) and 2.0 terabases (Tb) (equivalent to 16 human genomes) of genomic data in a single run, depending on the instrument and application. There are different price points per gigabase (Gb) for each instrument, and for different applications, which range from small-genome, amplicon, and targeted gene-panel sequencing to population-scale whole human genome sequencing. Since we launched our first sequencing system in 2007, our systems have reduced the cost of sequencing by more than a factor of 10,000. In addition, the sequencing time per Gb has dropped by a factor of approximately 3,500.

Our BaseSpace Informatics Suite cloud platform plays a critical role in supporting our sequencing applications. BaseSpace Suite integrates directly with our sequencing instruments, allowing customers to manage their biological sample and sequencing runs, process and analyze the raw genomic data, and derive meaningful results. It facilitates data sharing, provides data-storage solutions and streamlines analysis through a growing number of applications from us and the bioinformatics community. Some components of the BaseSpace Informatics Suite can also be installed for customers on-site.

For the fiscal years ended January 1, 2017, January 3, 2016, and December 28, 2014, sequencing revenue comprised 84%, 86%, and 81%, respectively, of total revenues.

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### Arrays

Arrays are used for a broad range of DNA and RNA analysis applications, including SNP genotyping, CNV analysis, gene expression analysis, and methylation analysis, and allow for the detection of millions of known genetic markers on a single array.

Our BeadArray technology combines microscopic beads and a substrate in a proprietary manufacturing process to produce arrays that can perform many assays simultaneously. This facilitates large-scale analysis of genetic variation and biological function in a uniquely high-throughput, cost-effective, and flexible manner. Using our BeadArray technology, we achieve high-throughput analysis via a high density of test sites per array and the ability to format arrays in various configurations. Varying the size, shape, and format of the substrate into which the beads self-assemble and creating specific bead types for different applications lets us address multiple markets and market segments. Both our iScan array scanner system and our NextSeq 550 system can be used to image the arrays.

For the fiscal years ended January 1, 2017, January 3, 2016, and December 28, 2014, array revenue comprised 16%, 14%, and 19%, respectively, of total revenues.

### Consumables

We have developed various library preparation and sequencing kits to simplify workflows and accelerate analysis. Our sequencing applications include whole-genome sequencing kits, which sequence entire genomes of any size and complexity, and targeted resequencing kits, which can sequence exomes, specific genes, RNA or other genomic regions of interest. Our sequencing kits maximize the ability of our customers to characterize the target genome accurately and are sold in various configurations, which address a wide range of applications.

Customers use Illumina array-based genotyping consumables for a wide range of analyses, including diverse species, disease-related mutations, and genetic characteristics associated with cancer. Customers can select from a range of human, animal, and agriculturally relevant genome panels or create their own custom arrays to investigate millions of genetic markers targeting any species.

### Our Services

We provide whole-genome sequencing, genotyping, NIPT, and support services. Human whole-genome sequencing services are provided through our CLIA-certified, CAP-accredited laboratory. Using our services, customers can perform whole-genome sequencing projects and microarray projects (including large-scale genotyping studies and whole-genome association studies). We also provide NIPT services through our partner laboratories that direct samples to us on a test send-out basis in our CLIA-certified, CAP-accredited laboratory. In addition, we also offer support services to customers who have purchased our products.

### Intellectual Property

We have an extensive intellectual property portfolio. As of February 1, 2017, we own or have exclusive licenses to 671 issued U.S. patents and 572 pending U.S. patent applications, including 31 allowed applications that have not yet issued as patents. Our issued and pending patents cover various aspects of our arrays, assays, oligo synthesis, sequencing technology, instruments, digital microfluidics, software, bioinformatics, and chemical-detection technologies, and have terms that expire between 2017 and 2038. We continue to file new patent applications to protect the full range of our technologies. We have filed or have been granted counterparts for many of these patents and applications in foreign countries.

We protect trade secrets, know-how, copyrights, and trademarks, as well as continuing technological innovation and licensing opportunities to develop and maintain our competitive position. Our success depends in part on obtaining patent protection for our products and processes, preserving trade secrets, patents, copyrights and trademarks, operating without infringing the proprietary rights of third parties, and acquiring licenses for technology or products.

We are party to various exclusive and nonexclusive license agreements and other arrangements with third parties that grant us rights to use key aspects of our sequencing and array technologies, assay methods, chemical detection methods, reagent kits, and scanning equipment. Our exclusive licenses expire with the termination of the underlying patents, which will occur between 2017 and 2032. We have additional nonexclusive license agreements with various third parties for other components of our products. In most cases, the agreements remain in effect over the term of the underlying patents, may be terminated at our request without further obligation, and require that we pay customary royalties.

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### Research and Development

Illumina has historically made substantial investments in research and development. Our research and development efforts prioritize continuous innovation coupled with product evolution.

Research and development expenses for fiscal 2016, 2015, and 2014 were \$504.4 million, \$401.5 million, and \$388.1 million, respectively. We expect research and development expense to increase during fiscal 2017 to support business growth and continuing expansion in research and product-development efforts.

### Marketing and Distribution

We market and distribute our products directly to customers in North America, Europe, Latin America, and the Asia-Pacific region. In each of these areas, dedicated sales, service, and application-support personnel are expanding and supporting their respective customer bases. In addition, we sell through life-science distributors in certain markets within Europe, the Asia-Pacific region, Latin America, the Middle East, and South Africa. We expect to continue increasing our sales and distribution resources during 2017 and beyond as we launch new products and expand our potential customer base.

### Manufacturing

We manufacture sequencing and array platforms and reagent kits. In 2016, we continued to increase our manufacturing capacity to meet customer demand. To address increasing product complexity and volume, we continue to automate manufacturing processes to accelerate throughput and improve quality and yield. We are committed to providing medical devices and related services that consistently meet customer and applicable regulatory requirements. We adhere to access and safety standards required by federal, state, and local health ordinances, such as standards for the use, handling, and disposal of hazardous substances. Our key manufacturing and distribution facilities operate under a quality management system certified to ISO 13485.

### Raw Materials

Our manufacturing operations require a wide variety of raw materials, electronic and mechanical components, chemical and biochemical materials, and other supplies. Multiple commercial sources provide many of our components and supplies, but there are some raw materials and components that we obtain from single-source suppliers. To manage potential risks arising from single source suppliers, we believe that we could redesign our products using alternative components or for use with alternative reagents, if necessary. In addition, while we attempt to keep our inventory at minimal levels, we purchase incremental inventory as circumstances warrant to protect our supply chain. If the capabilities of our suppliers and component manufacturers are limited or stopped, due to disasters, quality, regulatory, or other reasons, it could negatively impact our ability to manufacture our products.

### Competition

Although we believe that our products and services provide significant advantages over products and services currently available from other sources, we expect continued intense competition. Our competitors offer products and services for sequencing, SNP genotyping, gene expression, and molecular diagnostics markets. They include companies such as Agilent Technologies, Inc., BGI, Oxford Nanopore Technologies Limited, Pacific Biosciences of California, Inc., QIAGEN N.V., Roche Holding AG., and Thermo Fisher Scientific, Inc., among others. Some of these companies have or will have substantially greater financial, technical, research, and other resources than we do, along with larger, more established marketing, sales, distribution, and service organizations. In addition, they may have

greater name recognition than we do in the markets we address, and in some cases a larger installed base of systems. We expect new competitors to emerge and the intensity of competition to increase. To compete effectively, we must scale our organization and infrastructure appropriately and demonstrate that our products have superior throughput, cost, and accuracy.

#### Segment and Geographic Information

We are organized into three operating segments for purposes of evaluating our business operations and reviewing our financial results. One segment consists of Illumina's core operations (Core Illumina). The other two segments relate to the activities of our consolidated variable interest entities (VIEs), GRAIL and Helix. The combined results of operations of our consolidated VIEs became material during the year ended January 1, 2017. As such, we commenced reporting two segments, Core Illumina and Consolidated VIEs, during 2016.

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We currently sell our products to a number of customers outside the United States, including customers in other areas of North America, Latin America, Europe, and the Asia-Pacific region. Shipments to customers outside the United States totaled \$1,104.2 million, or 46% of total revenues, during fiscal 2016, compared to \$1,012.4 million, or 46%, and \$910.7 million, or 49%, in fiscal 2015 and 2014, respectively. The U.S. dollar has been determined to be the functional currency of the Company's international operations due to the primary activities of our foreign subsidiaries. We expect that sales to international customers will continue to be an important and growing source of revenue. See note "12. Segment Information, Geographic Data, and Significant Customers" in Part II, Item 8 of this Form 10-K for further information concerning our foreign and domestic operations.

## Backlog

Our backlog was approximately \$650 million and \$560 million as of January 1, 2017 and January 3, 2016, respectively. Generally, our backlog consists of orders believed to be firm as of the balance-sheet date. However, we may allow customers to make product substitutions as we launch new products. The timing of shipments depends on several factors, including agreed upon shipping schedules, which may span multiple quarters, and whether the product is catalog or custom. We expect approximately two-thirds of our backlog as of January 1, 2017, to be shipped within the fiscal year ending December 31, 2017. Although we generally recognize revenue upon the transfer of title to a customer, some customer agreements or applicable accounting treatments might require us to defer the recognition of revenue beyond title transfer.

## Environmental Matters

We are committed to the protection of our employees and the environment. Our operations require the use of hazardous materials that subject us to various federal, state, and local environmental and safety laws and regulations. We believe that we are in material compliance with current applicable laws and regulations. However, we could be held liable for damages and fines should contamination of the environment or individual exposures to hazardous substances occur. In addition, we cannot predict how changes in these laws and regulations, or the development of new laws and regulations, will affect our business operations or the cost of compliance.

## Government Regulation

As we expand product lines to address the diagnosis of disease, regulation by governmental authorities in the United States and other countries will become an increasingly significant factor in development, testing, production, and marketing. Products that we develop in the molecular diagnostic markets, depending on their intended use, may be regulated as medical devices by the FDA and comparable agencies in other countries. In the United States, certain of our products may require FDA clearance following a pre-market notification process, also known as a 510(k) clearance, or premarket approval (PMA) from the FDA before marketing. The usually shorter 510(k) clearance process, which we used for the FDA-cleared assays that are run on our FDA-regulated MiSeqDx instrument, generally takes from three to six months after submission, but it can take significantly longer. The longer PMA process is much more costly and uncertain. It generally takes from 9 to 18 months after a complete filing, but it can take significantly longer and typically requires conducting clinical studies, which are not always needed for a 510(k) clearance. All of the products that are currently regulated by the FDA as medical devices are also subject to the FDA Quality System Regulation (QSR). Obtaining the requisite regulatory approvals, including the FDA quality system inspections that are required for PMA approval, can be expensive and may involve considerable delay.

We cannot be certain which of our planned molecular diagnostic products will be subject to the shorter 510(k) clearance process and, in fact, some of our products may need to go through the PMA process. The regulatory approval process for such products may be significantly delayed, may be significantly more expensive than anticipated, and may conclude without such products being approved by the FDA. Without timely regulatory approval, we may not be able to launch or successfully commercialize such products.

Changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time during the development or marketing of our products. This may negatively affect our ability to obtain or maintain FDA or comparable regulatory clearance or approval of our products. In addition, the FDA may introduce new requirements that may change the regulatory requirements for either or both Illumina or our customers.

If our products labeled as “For Research Use Only. Not for use in diagnostic procedures,” or RUO, are used, or could be used, for the diagnosis of disease, the regulatory requirements related to marketing, selling, and supporting such products could



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be uncertain. This is true even if such use by our customers occurs without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

Illumina products sold as medical devices in Europe will be regulated under the In Vitro Diagnostics Directive (98/79/EC). This regulation includes requirements for both presentation and review of performance data and quality-system requirements.

Certain of our diagnostic products are currently available through laboratories that are certified under the Clinical Laboratory Improvements Amendments (CLIA) of 1988. These products are commonly called “laboratory developed tests,” or LDTs. For a number of years, the FDA has exercised its regulatory enforcement discretion to not regulate LDTs as medical devices if created and used within a single laboratory. However, the FDA is reexamining this regulatory approach and changes to the agency’s handling of LDTs could impact our business in ways that cannot be predicted at this time. In October 2014, the FDA published two draft guidance documents suggesting an approach for registration and listing of laboratories and assays along with a framework for regulation of LDTs by the FDA based on risk to patients rather than whether the LDTs were made by a conventional manufacturer or a single laboratory. The draft framework guidance includes pre-market review for higher-risk LDTs, including many used to guide treatment decisions, as well as companion diagnostics that have entered the market as LDTs. We cannot predict the nature or extent of the FDA's final guidance or regulation of LDTs, in general, or with respect to our or our customers’ LDTs, in particular.

Certification of CLIA laboratories includes standards in the areas of personnel qualifications, administration, and participation in proficiency testing, patient test management, and quality control procedures. CLIA also mandates that, for high complexity labs such as ours, to operate as a lab, we must have an accreditation by an organization recognized by CLIA such as the College of Pathologists (CAP), which we have obtained and must maintain. If we were to lose our CLIA certification or CAP accreditation, our business, financial condition, or results of operations could be adversely affected. In addition, state laboratory licensing and inspection requirements may also apply to our products, which, in some cases, are more stringent than CLIA requirements.

## Employees

As of January 1, 2017, we had more than 5,500 employees. We consider our employee relations to be positive. Our success will depend in large part upon our ability to attract and retain employees. In addition, we employ a number of temporary and contract employees. We face competition in this regard from other companies, research and academic institutions, government entities, and other organizations.

## ITEM 1A. Risk Factors.

Our business is subject to various risks, including those described below. In addition to the other information included in this Form 10-K, the following issues could adversely affect our operating results or our stock price.

If we do not successfully manage the development, manufacturing, and launch of new products or services, including product transitions, our financial results could be adversely affected.

We face risks associated with launching new products and pre-announcing products and services when the products or services have not been fully developed or tested. In addition, we may experience difficulty in managing or forecasting customer reactions, purchasing decisions, or transition requirements or programs with respect to newly launched products (or products in development), which could adversely affect sales of our existing products. For instance, in January 2017 we announced our NovaSeq 5000 and 6000 instrument systems, which were developed using our new

sequencing architecture. If our products and services are not able to deliver the performance or results expected by our target markets or are not delivered on a timely basis, our reputation and credibility may suffer. If we encounter development challenges or discover errors in our products late in our development cycle, we may delay the product launch date. The expenses or losses associated with unsuccessful product development or launch activities or lack of market acceptance of our new products could adversely affect our business, financial condition, or results of operations.

When we introduce or announce new or enhanced products, we face numerous risks relating to product transitions, including the inability to accurately forecast demand (including with respect to our existing products), manage excess and obsolete inventories, address new or higher product cost structures, and manage different sales and support requirements due to the type or complexity of the new or enhanced products. Announcements of currently planned or other new products may cause customers to defer or stop purchasing our products until new products become available. Our failure to effectively manage product transitions or introductions could adversely affect our business, financial condition, or results of operations.

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

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

Our continued growth is dependent on continuously developing and commercializing new products.

Our target markets are characterized by rapid technological change, evolving industry standards, changes in customer needs, existing and emerging competition, strong price competition, and frequent new product introductions. Accordingly, our continued growth depends on developing and commercializing new products and services, including improving our existing products and services, in order to address evolving market requirements on a timely basis. If we fail to innovate or adequately invest in new technologies, our products and services will become dated, and we could lose our competitive position in the markets that we serve as customers purchase new products offered by our competitors. We believe that successfully introducing new products and technologies in our target markets on a timely basis provides a significant competitive advantage because customers make an investment of time in selecting and learning to use a new product and may be reluctant to switch once that selection is made.

To the extent that we fail to introduce new and innovative products, or such products are not accepted in the market or suffer significant delays in development, we may lose market share to our competitors, which will be difficult or impossible to regain. An inability, for technological or other reasons, to successfully develop and introduce new products on a timely basis could reduce our growth rate or otherwise have an adverse effect on our business. In the past, we have experienced, and are likely to experience in the future, delays in the development and introduction of new products. There can be no assurance that we will keep pace with the rapid rate of change in our markets or that our new products will adequately meet the requirements of the marketplace, achieve market acceptance, or compete successfully with competing technologies. Some of the factors affecting market acceptance of new products and services include:

- availability, quality, and price relative to competing products and services;
- the functionality and performance of new and existing products and services;
- the timing of introduction of new products or services relative to competing products and services;
- scientists' and customers' opinions of the utility of new products or services;
- citation of new products or services in published research;
- regulatory trends and approvals; and
- general trends in life sciences research and applied markets.

We may also have to write off excess or obsolete inventory if sales of our products are not consistent with our expectations or the market requirements for our products change due to technical innovations in the marketplace.

We depend on third-party manufacturers and suppliers for some of our products, or sub-assemblies, components, and materials used in our products, and if shipments from these manufacturers or suppliers are delayed or interrupted, or if the quality of the products, components, or materials supplied do not meet our requirements, we may not be able to launch, manufacture, or ship our products in a timely manner, or at all.

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The complex nature of our products requires customized, precision-manufactured sub-assemblies, components, and materials that currently are available from a limited number of sources, and, in the case of some sub-assemblies, components, and materials, from only a single source. If deliveries from these vendors are delayed or interrupted for any reason, or if we are otherwise unable to secure a sufficient supply, we may not be able to obtain these sub-assemblies, components, or materials on a timely basis or in sufficient quantities or qualities, or at all, in order to meet demand for our products. We may need to enter into contractual relationships with manufacturers for commercial-scale production of some of our products, in whole or in part, or develop these capabilities internally, and there can be no assurance that we will be able to do this on a timely basis, in sufficient quantities, or on commercially reasonable terms. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. The time and effort required to qualify a new supplier could result in additional costs, diversion of resources, or reduced manufacturing yields, any of which would negatively impact our operating results. Accordingly, we may not be able to establish or maintain reliable, high-volume manufacturing at commercially reasonable costs or at all. In addition, the manufacture or shipment of our products may be delayed or interrupted if the quality of the products, sub-assemblies, components, or materials supplied by our vendors does not meet our requirements. Current or future social and environmental regulations or critical issues, such as those relating to the sourcing of conflict minerals from the Democratic Republic of the Congo or the need to eliminate environmentally sensitive materials from our products, could restrict the supply of components and materials used in production or increase our costs. Any delay or interruption to our manufacturing process or in shipping our products could result in lost revenue, which would adversely affect our business, financial condition, or results of operations.

If defects are discovered in our products, we may incur additional unforeseen costs, our products may be subject to recalls, customers may not purchase our products, our reputation may suffer, and ultimately our sales and operating earnings could be negatively impacted.

Our products incorporate complex, precision-manufactured mechanical parts, electrical components, optical components, and fluidics, as well as computer software, any of which may contain errors or failures, especially when first introduced. In the course of conducting our business, we must adequately address quality issues associated with our products and services, including defects in our engineering, design, and manufacturing processes, as well as defects in third-party components included in our products. In addition, new products or enhancements may contain undetected errors or performance problems that, despite testing, are discovered only after commercial shipment. Defects or errors in our products may discourage customers from purchasing our products. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins. Identifying the root cause of quality issues, particularly those affecting reagents and third-party components, may be difficult, which increases the time needed to address quality issues as they arise and increases the risk that similar problems could recur. Because our products are designed to be used to perform complex genomic analysis, we expect that our customers will have an increased sensitivity to such defects. If we do not meet applicable regulatory or quality standards, our products may be subject to recall, and, under certain circumstances, we may be required to notify applicable regulatory authorities about a recall. If our products are subject to recall or shipment holds, our reputation, business, financial condition, or results of operations could be adversely affected.

We face intense competition, which could render our products obsolete, result in significant price reductions, or substantially limit the volume of products that we sell.

We compete with life sciences companies that design, manufacture, and market products for analysis of genetic variation and biological function and other applications using a wide range of competing technologies. We anticipate that we will continue to face increased competition as existing companies develop new or improved products and as new companies enter the market with new technologies. One or more of our competitors may render one or more of our technologies obsolete or uneconomical. Some of our competitors have greater financial and personnel resources, broader product lines, a more established customer base, and more experience in research and development than we

do. Furthermore, life sciences, clinical genomics, and pharmaceutical companies, which are our potential customers and strategic partners, could also develop competing products. We believe that customers in our markets display a significant amount of loyalty to their initial supplier of a particular product; therefore, it may be difficult to generate sales to potential customers who have purchased products from competitors. To the extent we are unable to be the first to develop or supply new products, our competitive position may suffer.

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The market for molecular diagnostics products is currently limited and highly competitive, with several large companies already having significant market share, intellectual property portfolios, and regulatory expertise. Established diagnostic companies also have an installed base of instruments in several markets, including clinical and reference laboratories, which could deter acceptance of our products. In addition, some of these companies have formed alliances with genomics companies that provide them access to genetic information that may be incorporated into their diagnostic tests.

As we develop, market, or sell diagnostic tests, we may encounter delays in receipt, or limits in the amount, of reimbursement approvals and public health funding, which will impact our ability to grow revenues in the healthcare market.

Physicians and patients may not order diagnostic tests that we develop, market, or sell, such as our verifi prenatal test, unless third-party payors, such as managed care organizations as well as government payors such as Medicare and Medicaid and governmental payors outside of the United States, pay a substantial portion of the test price. Third-party payors are often reluctant to reimburse healthcare providers for the use of medical tests that involve new technologies or provide novel diagnostic information. In addition, third-party payors are increasingly limiting reimbursement coverage for medical diagnostic products and, in many instances, are exerting pressure on diagnostic product suppliers to reduce their prices. Reimbursement by a payor may depend on a number of factors, including a payor's determination that tests using our technologies are:

- not experimental or investigational;
- medically necessary;
- appropriate for the specific patient;
- cost-effective;
- supported by peer-reviewed publications; and
- included in clinical practice guidelines.

Since each third-party payor often makes reimbursement decisions on an individual patient basis, obtaining such approvals is a time-consuming and costly process that requires us to provide scientific and clinical data supporting the clinical benefits of each of our products. As a result, there can be no assurance that reimbursement approvals will be obtained. This process can delay the broad market introduction of new products, and could have a negative effect on our results of operations. As a result, third-party reimbursement may not be consistent or financially adequate to cover the cost of diagnostic products that we develop, market, or sell. This could limit our ability to sell our products or cause us to reduce prices, which would adversely affect our results of operations.

Even if our tests are being reimbursed, third party payors may withdraw their coverage policies, cancel their contracts with our customers at any time, review and adjust the rate of reimbursement, require co-payments from patients, or stop paying for our tests, which would reduce our revenues. In addition, insurers, including managed care organizations as well as government payors such as Medicare and Medicaid, have increased their efforts to control the cost, utilization, and delivery of healthcare services. These measures have resulted in reduced payment rates and decreased utilization for the clinical laboratory industry. Reductions in the reimbursement rate of payors may occur in the future. Reductions in the prices at which our tests are reimbursed could have a negative impact on our results of operations.

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

Our success depends in part on our non-infringement of the patents or proprietary rights of third parties. Third parties have asserted and may in the future assert that we are employing their proprietary technology without authorization. As we enter new markets or introduce new products, we expect that competitors will likely claim that our products

infringe their intellectual property rights as part of a business strategy to impede our successful competition. In addition, third parties may have obtained and may in the future obtain patents allowing them to claim that the use of our technologies infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against any of these claims. Any adverse ruling or perception of an adverse ruling in defending ourselves against these claims could have an adverse impact on our stock price, which may be disproportionate to the actual impact of the ruling itself. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to develop further, commercialize, or sell products or services, and could result in the award of substantial damages against us. In the event of a successful infringement claim against us, we may be required to pay damages and obtain



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one or more licenses from third parties, or be prohibited from selling certain products or services. In addition, we may be unable to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins and earnings per share. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products or services could adversely affect our ability to grow or maintain profitability.

Reduction or delay in research and development budgets and government funding may adversely affect our revenue.

The timing and amount of revenues from customers that rely on government and academic research funding may vary significantly due to factors that can be difficult to forecast, and there remains significant uncertainty concerning government and academic research funding worldwide as governments in the United States and Europe, in particular, focus on reducing fiscal deficits while at the same time confronting uncertain economic growth. Funding for life science research has increased more slowly during the past several years compared to previous years and has declined in some countries. Government funding of research and development is subject to the political process, which is inherently fluid and unpredictable. Other programs, such as defense, entitlement programs, or general efforts to reduce budget deficits could be viewed by governments as a higher priority. These budgetary pressures may result in reduced allocations to government agencies that fund research and development activities, such as the U.S. National Institute of Health, or NIH. Past proposals to reduce budget deficits have included reduced NIH and other research and development allocations. Any shift away from the funding of life sciences research and development or delays surrounding the approval of government budget proposals may cause our customers to delay or forego purchases of our products, which could adversely affect our business, financial condition, or results of operations.

Our acquisitions expose us to risks that could adversely affect our business, and we may not achieve the anticipated benefits of acquisitions of businesses or technologies.

As part of our strategy to develop and identify new products, services, and technologies, we have made, and may continue to make, acquisitions of technologies, products, or businesses. Acquisitions involve numerous risks and operational, financial, and managerial challenges, including the following, any of which could adversely affect our business, financial condition, or results of operations:

- difficulties in integrating new operations, technologies, products, and personnel;
- lack of synergies or the inability to realize expected synergies and cost-savings;
- difficulties in managing geographically dispersed operations;
- underperformance of any acquired technology, product, or business relative to our expectations and the price we paid;
- negative near-term impacts on financial results after an acquisition, including acquisition-related earnings charges;
- the potential loss of key employees, customers, and strategic partners of acquired companies;
- claims by terminated employees and shareholders of acquired companies or other third parties related to the transaction;
- the issuance of dilutive securities, assumption or incurrence of additional debt obligations or expenses, or use of substantial portions of our cash;
  - diversion of management's attention and company resources from existing operations of the business;
- inconsistencies in standards, controls, procedures, and policies;
- the impairment of intangible assets as a result of technological advancements, or worse-than-expected performance of acquired companies; and
- assumption of, or exposure to, known or unknown contingent liabilities or liabilities that are difficult to identify or accurately quantify.



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In addition, the successful integration of acquired businesses requires significant efforts and expense across all operational areas, including sales and marketing, research and development, manufacturing, finance, legal, and information technologies. There can be no assurance that any of the acquisitions we make will be successful or will be, or will remain, profitable. Our failure to successfully address the above risks may prevent us from achieving the anticipated benefits from any acquisition in a reasonable time frame, or at all.

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

We continue to rapidly increase our manufacturing and service capacity to meet the anticipated demand for our products. Although we have significantly increased our manufacturing and service capacity and we believe we have plans in place sufficient to ensure we have adequate capacity to meet our current business plans, there are uncertainties inherent in expanding our manufacturing and service capabilities, and we may not be able to sufficiently increase our capacity in a timely manner. For example, manufacturing and product quality issues may arise as we increase production rates at our manufacturing facilities and launch new products. Also, we may not manufacture the right product mix to meet customer demand, especially as we introduce new products. As a result, we may experience difficulties in meeting customer, collaborator, and internal demand, in which case we could lose customers or be required to delay new product introductions, and demand for our products could decline. Additionally, in the past, we have experienced variations in manufacturing conditions and quality control issues that have temporarily reduced or suspended production of certain products. Due to the intricate nature of manufacturing complex instruments, consumables, and products that contain DNA and enzymes, we may encounter similar or previously unknown manufacturing difficulties in the future that could significantly reduce production yields, impact our ability to launch or sell these products (or to produce them economically), prevent us from achieving expected performance levels, any of which could adversely affect our business, financial condition, or results of operations.

An interruption in our ability to manufacture our products or an inability to obtain key components or raw materials due to a catastrophic disaster or infrastructure could adversely affect our business.

We currently manufacture in a limited number of locations. Our manufacturing facilities are located in San Diego and the San Francisco Bay Area in California; Madison, Wisconsin; and Singapore. These areas are subject to natural disasters such as earthquakes, wildfires, or floods. If a natural disaster were to damage one of our facilities significantly or if other events were to cause our operations to fail, we may be unable to manufacture our products, provide our services, or develop new products. In addition, if the capabilities of our suppliers and component manufacturers are limited or stopped, due to disasters, quality, regulatory, or other reasons, it could negatively impact our ability to manufacture our products.

Many of our manufacturing processes are automated and are controlled by our custom-designed laboratory information management system (LIMS). Additionally, the decoding process in our array manufacturing requires significant network and storage infrastructure. If either our LIMS system or our networks or storage infrastructure were to fail for an extended period of time, it may adversely impact our ability to manufacture our products on a timely basis and could prevent us from achieving our expected shipments in any given period.

We also rely on our technology infrastructure, among other functions, to interact with suppliers; sell our products and services; fulfill orders; bill, collect, and make payments; ship products; provide services and support to customers; fulfill contractual obligations; and otherwise conduct business. Our systems may be vulnerable to damage or interruption from natural disasters, power loss, telecommunication failures, terrorist attacks, computer viruses, computer denial-of-service attacks, unauthorized access to customer or employee data or company trade secrets, and other attempts to harm our systems. Certain of our systems are not redundant, and our disaster recovery planning is

not sufficient for every eventuality. Despite any precautions we may take, such problems could result in, among other consequences, interruptions in our services, which could harm our reputation and financial results.

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

Our future success depends upon the continuing services of members of our senior management team and scientific and engineering personnel. The loss of their services could adversely impact our ability to achieve our business objectives. In addition, the continued growth of our business depends on our ability to hire additional qualified personnel with expertise in molecular biology, chemistry, biological information processing, software, engineering, sales, marketing, and technical support. We compete for qualified management and scientific personnel with other life science and technology companies, universities, and research institutions. Competition for these individuals, particularly in the San Diego and San Francisco areas, is intense,

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and the turnover rate can be high. Moreover, changes in immigration policies, laws and regulations in the United States or other jurisdictions may make it more difficult for us to hire and retain members of management and scientific and engineering personnel. Failure to attract and retain management and scientific and engineering personnel could prevent us from pursuing collaborations or developing our products or technologies. Additionally, integration of acquired companies and businesses can be disruptive, causing key employees of the acquired business to leave. Further, we use share-based compensation, including restricted stock units and performance stock units to attract key personnel, incentivize them to remain with us, and align their interests with those of the Company by building long-term stockholder value. If our stock price decreases, the value of these equity awards decreases and therefore reduces a key employee's incentive to stay.

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

The proprietary positions of companies developing tools for the life sciences, genomics, forensics, agricultural, and pharmaceutical industries, including our proprietary position, generally are uncertain and involve complex legal and factual questions. Our success depends to a large extent on our ability to develop proprietary products and technologies and to obtain patents and maintain adequate protection of our intellectual property in the United States and other countries. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant challenges in establishing and enforcing their proprietary rights outside of the United States. These challenges can be caused by the absence of rules and methods for the establishment and enforcement of intellectual property rights outside of the United States.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. Any finding that our patents or applications are unenforceable could harm our ability to prevent others from practicing the related technology, and a finding that others have inventorship or ownership rights to our patents and applications could require us to obtain certain rights to practice related technologies, which may not be available on favorable terms, if at all. Furthermore, as issued patents expire, we may lose some competitive advantage as others develop competing products, and, as a result, we may lose revenue.

In addition, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products and may therefore fail to provide us with any competitive advantage. We may need to initiate lawsuits to protect or enforce our patents, or litigate against third party claims, which would be expensive, and, if we lose, may cause us to lose some of our intellectual property rights and reduce our ability to compete in the marketplace. Furthermore, these lawsuits may divert the attention of our management and technical personnel. There is also the risk that others may independently develop similar or alternative technologies or design around our patented technologies. In that regard, certain patent applications in the United States may be maintained in secrecy until the patents issue, and publication of discoveries in the scientific or patent literature tend to lag behind actual discoveries by several months.

We also rely upon trade secrets and proprietary know-how protection for our confidential and proprietary information, and we have taken security measures to protect this information. These measures, however, may not provide adequate protection for our trade secrets, know-how, or other confidential information.

Our strategic investments and joint ventures may result in losses.

We periodically make strategic investments in various public and private companies with businesses or technologies that may complement our business. In addition, we periodically form companies, such as GRAIL and Helix, that remain consolidated within our financial statements but receive substantial funding from third-party investors who are granted certain control and governance rights. The market values of these strategic investments may fluctuate due to

market conditions and other conditions over which we have no control. Other-than-temporary declines in the market price and valuations of the securities that we hold in other companies would require us to record losses related to our investment. This could result in future charges to our earnings. It is uncertain whether or not we will realize any long-term benefits associated with these strategic investments.

In January 2017, we announced that GRAIL has received indications of interest to invest approximately \$1 billion for GRAIL's Series B financing, primarily from undisclosed private and strategic investors. GRAIL intends to raise additional capital in the Series B financing from other investors and has engaged a placement agent in connection with the contemplated additional financing. GRAIL intends to close the Series B prior to the end of March 2017. As of the closing of this transaction, we expect our voting interest to become less than 20 percent and that our remaining interest in GRAIL will be treated as a cost-method investment. In addition, we will no longer have representation on GRAIL's board of directors. Any failure by GRAIL to close the contemplated financing transactions would have a significant, negative impact on its ability to grow. Such a failure

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could also result in the continued consolidation of GRAIL within our financial statements, which would result in incremental dilution compared to fiscal year 2016.

Security breaches, including with respect to cyber-security, and other disruptions could compromise our information, products, and services and expose us to liability, which could cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information (and that of our customers), and personally identifiable information of our customers and employees, in our data centers and on our networks. The secure maintenance of this information is important to our operations and business strategy. Despite our security measures, our information technology and infrastructure may be vulnerable to cyber-attacks by hackers or breached due to employee error, malfeasance, or other disruptions. As a leader in the field of genetic analysis, we may face cyber-attacks that attempt to penetrate our network security, including our data centers; sabotage or otherwise disable our research, products, and services, including instruments at our customers' sites; misappropriate our or our customers' and partners' proprietary information, which may include personally identifiable information; or cause interruptions of our internal systems and services. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost, or stolen. Any such access, disclosure, or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and damage to our reputation.

Our products, if used for the diagnosis of disease, could be subject to government regulation, and the regulatory approval and maintenance process for such products may be expensive, time-consuming, and uncertain both in timing and in outcome.

Our products are not subject to FDA clearance or approval if they are not intended to be used for the diagnosis, treatment or prevention of disease. However, as we expand our product line to encompass products that are intended to be used for the diagnosis of disease, such as our FDA-regulated MiSeqDx, certain of our products will become subject to regulation by the FDA, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. Such regulatory approval processes or clearances may be expensive, time-consuming, and uncertain, and our failure to obtain or comply with such approvals and clearances could have an adverse effect on our business, financial condition, or operating results. In addition, changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required.

Molecular diagnostic products are regulated as medical devices by the FDA and comparable international agencies and may require either clearance from the FDA following the 510(k) pre-market notification process or premarket approval from the FDA, in each case prior to marketing. Obtaining the requisite regulatory approvals can be expensive and may involve considerable delay. If we fail to obtain, or experience significant delays in obtaining, regulatory approvals for molecular diagnostic products that we develop, we may not be able to launch or successfully commercialize such products in a timely manner, or at all.

In addition, if our products labeled as "For Research Use Only. Not for use in diagnostic procedures," or RUO, are used, or could be used, for the diagnosis of disease, the regulatory requirements related to marketing, selling, and supporting such products could change or be uncertain, even if such use by our customers is without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

If the FDA requires in the future that any of our LDT products be subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

Certain of our diagnostic products are currently available through laboratories that are certified under the Clinical Laboratory Improvements Amendments (CLIA) of 1988. These products are commonly called “laboratory developed tests,” or LDTs. For a number of years, the FDA has exercised its regulatory enforcement discretion to not regulate LDTs as medical devices if created and used within a single laboratory. However, the FDA has been reconsidering its enforcement discretion policy and has commented that regulation of LDTs may be warranted because of the growth in the volume and complexity of testing services utilizing LDTs. In October 2014, the FDA published two draft guidance documents suggesting an approach for registration and listing of laboratories and assays along with a framework for regulation of LDTs by the FDA based on risk to patients rather than whether the LDTs were made by a conventional manufacturer or a single laboratory. The draft framework guidance includes pre-market review for higher-risk LDTs, including many used to guide treatment decisions, as well as companion diagnostics that have entered the market as LDTs. We cannot predict the nature or extent of the FDA's final guidance or regulation of LDTs, in general, or with respect to our LDTs, in particular. If the FDA requires in the future that



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LDT products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

If product or service liability lawsuits are successfully brought against us, we may face reduced demand for our products and incur significant liabilities.

Our products and services are used for sensitive applications, and we face an inherent risk of exposure to product or service liability claims if our products or services are alleged to have caused harm, resulted in false negatives or false positives, or do not perform in accordance with specifications. Product liability claims filed against us or against third parties to whom we may have an obligation could be costly and time-consuming to defend and result in substantial damages or reputational risk. We cannot be certain that we would be able to successfully defend any product or service liability lawsuit brought against us. Regardless of merit or eventual outcome, product or service liability claims may result in:

- decreased demand for our products;
- injury to our reputation;
- increased product liability insurance costs;
- costs of related litigation; and
- substantial monetary awards to plaintiffs.

Although we carry product and service liability insurance, if we become the subject of a successful product or service liability lawsuit, our insurance may not cover all substantial liabilities, which could have an adverse effect on our business, financial condition, or results of operations.

Doing business internationally creates operational and financial risks for our business.

Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. If we fail to coordinate and manage these activities effectively, including the risks noted below, our business, financial condition, or results of operations could be adversely affected. We have sales offices located internationally throughout Europe, the Asia-Pacific region, and Brazil, as well as manufacturing facilities in Singapore. Shipments to customers outside the United States comprised 46%, 46%, and 49% of our total revenue for fiscal years 2016, 2015, and 2014, respectively.

During 2016, a significant portion of our sales were denominated in foreign currencies while the majority of our purchases of raw materials were denominated in U.S. dollars. Changes in the value of the relevant currencies may affect the cost of certain items required in our operations. Changes in currency exchange rates may also affect the relative prices at which we are able to sell products in the same market. Our revenues from international customers may be negatively impacted as increases in the U.S. dollar relative to our international customers' local currency could make our products more expensive, impacting our ability to compete. Our costs of materials from international suppliers may increase if, in order to continue doing business with us, they raise their prices as the value of the U.S. dollar decreases relative to their local currency. Foreign policies and actions regarding currency valuation could result in actions by the United States and other countries to offset the effects of such fluctuations. Recent global financial conditions have led to a high level of volatility in foreign currency exchange rates and that level of volatility may continue, which could adversely affect our business, financial condition, or results of operations.

In addition to the foregoing risks, international operations entail the following risks:

- longer payment cycles and difficulties in collecting accounts receivable outside of the United States;
- longer sales cycles due to the volume of transactions taking place through public tenders;
- challenges in staffing and managing foreign operations;

tariffs and other trade barriers;

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

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

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

Additionally, we must comply with complex foreign and U.S. laws and regulations, such as the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and other local laws prohibiting corrupt payments to governmental officials, anti-competition regulations and sanctions imposed by the U.S. Office of Foreign Assets Control and other similar laws and regulations. Violations of these laws and regulations could result in fines and penalties, criminal sanctions, restrictions on our business conduct and on our ability to offer our products in one or more countries, and could also materially affect our brand, our ability to attract and retain employees, our international operations, our business and our operating results. Although we have implemented policies and procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, or agents will not violate our policies.

We are subject to risks related to taxation in multiple jurisdictions.

We are subject to income taxes in both the United States and numerous foreign jurisdictions. Significant judgments based on interpretations of existing tax laws or regulations are required in determining the provision for income taxes. Our effective income tax rate could be adversely affected by various factors, including, but not limited to, changes in the mix of earnings in tax jurisdictions with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in existing tax policies, laws, regulations, or rates, changes in the level of non-deductible expenses (including share-based compensation), location of operations, changes in our future levels of research and development spending, mergers and acquisitions, or the result of examinations by various tax authorities. Although we believe our tax estimates are reasonable, if the U.S. Internal Revenue Service or other taxing authority disagrees with the positions taken by the Company on its tax returns, we could have additional tax liability, including interest and penalties. If material, payment of such additional amounts upon final adjudication of any disputes could have a material impact on our results of operations and financial position.

Our operating results may vary significantly from period to period, and we may not be able to sustain operating profitability.

Our revenue is subject to fluctuations due to the timing of sales of high-value products and services, the effects of new product launches and related promotions, the timing and availability of our customers' funding, the impact of seasonal spending patterns, the timing and size of research projects our customers perform, changes in overall spending levels in the life sciences industry, and other unpredictable factors that may affect customer ordering patterns. Given the difficulty in predicting the timing and magnitude of sales for our products and services, we may experience quarter-to-quarter fluctuations in revenue resulting in the potential for a sequential decline in quarterly revenue. While we anticipate future growth, there is some uncertainty as to the timing of revenue recognition on a quarterly basis. This is because a substantial portion of our quarterly revenue is typically recognized in the last month of a quarter and because the pattern for revenue generation during that month is normally not linear, with a concentration of orders in the final weeks of the quarter. In light of that, our revenue cut-off and recognition procedures, together with our manufacturing and shipping operations, may experience increased pressure and demand during the time period shortly before the end of a fiscal quarter.

A large portion of our expenses are relatively fixed, including expenses for facilities, equipment, and personnel. To meet the anticipated growth in our business, we may incur fixed expenses, such as costs related to facility expansions, before we generate revenue sufficient to fully support such expenses. In addition, we expect operating expenses to continue to increase significantly in absolute dollars, and we expect that our research and development and selling and marketing expenses will increase at a higher rate in the future as a result of the development and launch of new products. Accordingly, our ability to sustain profitability will depend in part on the rate of growth, if any, of our

revenue and on the level of our expenses, and if revenue does not grow as anticipated, we may not be able to maintain annual or quarterly profitability. Any significant delays in the commercial launch of our products, unfavorable sales trends in our existing product lines, or impacts from the other factors mentioned above, could adversely affect our future revenue growth or cause a sequential decline in quarterly revenue. In addition, non-cash share-based compensation expense and expenses related to prior and future acquisitions are also likely to continue to adversely affect our future profitability. Due to the possibility of significant fluctuations in our revenue and expenses, particularly from quarter to quarter, we believe that quarterly comparisons of our operating results are not a good indication of our future performance. If our operating results fluctuate or do not meet the expectations of stock market analysts and investors, our stock price could decline.

From time to time, we receive large orders that have a significant effect on our operating results in the period in which the order is recognized as revenue. The timing of such orders is difficult to predict, and the timing of revenue recognition from

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such orders may affect period to period changes in net sales. As a result, our operating results could vary materially from quarter to quarter based on the receipt of such orders and their ultimate recognition as revenue.

We may not be able to convert our order backlog into revenue.

Our backlog consists of orders believed to be firm as of the balance-sheet date. However, we may allow customers to make product substitutions as we launch new products. We may not receive revenue from some of these orders, and the order backlog we report may not be indicative of our future revenue. Many events can cause an order to be delayed or not completed at all, some of which may be out of our control. If we delay fulfilling customer orders, or if customers reconsider their orders, those customers may seek to cancel or modify their orders with us. Customers may otherwise seek to cancel or delay their orders even if we are prepared to fulfill them. If our orders in backlog do not result in sales, our operating results may suffer.

Disruption of critical information technology systems or material breaches in the security of our systems could have an adverse effect on our operations, business, customer relations, and financial condition.

Information technology systems (IT) help us operate efficiently, interface with customers, maintain financial accuracy and efficiency, and accurately produce our financial statements. IT systems are used extensively in virtually all aspects of our business, including product manufacturing and supply chain, sales forecast, order fulfillment and billing, customer service, logistics, and management of financial reports and data. Our success depends, in part, on the continued and uninterrupted performance of our IT systems. IT systems may be vulnerable to damage from a variety of sources, including telecommunications or network failures, power loss, natural disasters, human acts, computer viruses, computer denial-of-service attacks, unauthorized access to customer or employee data or company trade secrets, and other attempts to harm our systems. Certain of our systems are not redundant, and our disaster recovery planning is not sufficient for every eventuality. Despite any precautions we may take, such problems could result in, among other consequences, disruption of our operations, which could harm our reputation and financial results.

If we do not allocate and effectively manage the resources necessary to build and sustain the proper IT infrastructure, we could be subject to transaction errors, processing inefficiencies, the loss of customers, business disruptions, or the loss of or damage to intellectual property through security breach. If our data management systems do not effectively collect, store, process, and report relevant data for the operation of our business, whether due to equipment malfunction or constraints, software deficiencies, or human error, our ability to effectively plan, forecast, and execute our business plan and comply with applicable laws and regulations will be impaired. Any such impairment could adversely affect our reputation, financial condition, results of operations, cash flows, and the timeliness with which we report our internal and external operating results.

As we continuously adjust our work-flow and business practices and add additional functionality to our enterprise resource planning software and other software applications, problems could arise that we have not foreseen, including interruptions in service, loss of data, or reduced functionality. Such problems could adversely impact our ability to provide quotes, take customer orders, and otherwise run our business in a timely manner. In addition, if our new systems fail to provide accurate and increased visibility into pricing and cost structures, it may be difficult to improve or maximize our profit margins. As a result, our results of operations and cash flows could be adversely affected.

Changes in accounting standards and subjective assumptions, estimates, and judgments by management related to complex accounting matters could significantly affect our financial results or financial condition.

Generally accepted accounting principles and related accounting pronouncements, implementation guidelines, and interpretations with regard to a wide range of matters that are relevant to our business, such as revenue recognition, asset impairment and fair value determinations, inventories, business combinations and intangible asset valuations,

and litigation, are highly complex and involve many subjective assumptions, estimates, and judgments. In particular, accounting rules related to companies that we form together with, or that receive substantial funding from, third-party investors such as GRAIL and Helix are highly complex and involve many subjective assumptions, estimates, and judgments. Changes in these rules or their interpretation or changes in underlying assumptions, estimates, or judgments could significantly change our reported or expected financial performance or financial condition.

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Ethical, legal, and social concerns related to the use of genetic information could reduce demand for our products or services.

Our products may be used to provide genetic information about humans, agricultural crops, other food sources, and other living organisms. The information obtained from our products could be used in a variety of applications, which may have underlying ethical, legal, and social concerns regarding privacy and the appropriate uses of the resulting information, including preimplantation genetic screening of embryos, prenatal genetic testing, genetic engineering or modification of agricultural products, or testing genetic predisposition for certain medical conditions, particularly for those that have no known cure. Governmental authorities could, for social or other purposes, call for limits on or regulation of the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, such concerns may lead individuals to refuse to use genetics tests even if permissible. These and other ethical, legal, and social concerns about genetic testing may limit market acceptance of our technology for certain applications or reduce the potential markets for our technology, either of which could have an adverse effect on our business, financial condition, or results of operations.

Conversion of our outstanding convertible notes may result in losses.

As of January 1, 2017, we had \$632.5 million aggregate principal amount of convertible notes due 2019, and \$517.5 million aggregate principal amount of convertible notes due 2021 outstanding. The notes are convertible into cash, and if applicable, shares of our common stock under certain circumstances, including trading price conditions related to our common stock. Upon conversion, we are required to record a gain or loss for the difference between the fair value of the notes to be extinguished and their corresponding net carrying value. The fair value of the notes to be extinguished depends on our current incremental borrowing rate. The net carrying value of our notes has an implicit interest rate of 2.9% with respect to convertible notes due 2019, and 3.5% with respect to convertible notes due 2021. If our incremental borrowing rate at the time of conversion is lower than the implied interest rate of the notes, we will record a loss in our consolidated statement of income during the period in which the notes are converted.

Our Certificate of Incorporation and Bylaws include anti-takeover provisions that may make it difficult for another company to acquire control of us or limit the price investors might be willing to pay for our stock.

Certain provisions of our Certificate of Incorporation and Bylaws could delay the removal of incumbent directors and could make it more difficult to successfully complete a merger, tender offer, or proxy contest involving us. Our Certificate of Incorporation has provisions that give our Board the ability to issue preferred stock and determine the rights and designations of the preferred stock at any time without stockholder approval. The rights of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a majority of our outstanding voting stock. In addition, the staggered terms of our board of directors could have the effect of delaying or deferring a change in control.

In addition, certain provisions of the Delaware General Corporation Law (DGCL), including Section 203 of the DGCL, may have the effect of delaying or preventing changes in the control or management of Illumina. Section 203 of the DGCL provides, with certain exceptions, for waiting periods applicable to business combinations with stockholders owning at least 15% and less than 85% of the voting stock (exclusive of stock held by directors, officers, and employee plans) of a company.

The above factors may have the effect of deterring hostile takeovers or otherwise delaying or preventing changes in the control or management of Illumina, including transactions in which our stockholders might otherwise receive a premium over the fair market value of our common stock.

ITEM 1B. Unresolved Staff Comments.

None.

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## ITEM 2. Properties.

The following table summarizes the facilities we lease as of January 1, 2017, including the location and size of each principal facility, and their designated use. We believe our facilities are adequate for our current and near-term needs, and will be able to locate additional facilities as needed.

Location	Approximate Square Feet	Operation	Lease Expiration Dates
San Diego, CA*	902,000	R&D, Manufacturing, Warehouse, Distribution, and Administrative	2018 – 2031
San Francisco Bay Area, CA*	274,000	R&D, Manufacturing, Warehouse, and Administrative	2018 – 2026
Singapore	211,000	R&D, Manufacturing, Warehouse, Distribution, and Administrative	2018 – 2021
Cambridge, United Kingdom*	105,000	R&D, Manufacturing, and Administrative	2017 – 2024
Eindhoven, the Netherlands	42,000	Distribution and Administrative	2020
Madison, WI	73,000	R&D, Manufacturing, Warehouse, Distribution, and Administrative	2018 – 2019
Other	47,000	Administrative	2017 – 2019

\*Excludes approximately 885,000 square feet for which the leases do not commence until 2017 and beyond.

## ITEM 3. Legal Proceedings.

We are involved in various lawsuits and claims arising in the ordinary course of business, including actions with respect to intellectual property, employment, and contractual matters. In connection with these matters, we assesses, on a regular basis, the probability and range of possible loss based on the developments in these matters. A liability is recorded in the financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable results could occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review outstanding legal matters to determine the adequacy of the liabilities accrued and related disclosures. The amount of ultimate loss may differ from these estimates. Each matter presents its own unique circumstances, and prior litigation does not necessarily provide a reliable basis on which to predict the outcome, or range of outcomes, in any individual proceeding. Because of the uncertainties related to the occurrence, amount, and range of loss on any pending litigation or claim, we are currently unable to predict their ultimate outcome, and, with respect to any pending litigation or claim where no liability has been accrued, to make a meaningful estimate of the reasonably possible loss or range of loss that could result from an unfavorable outcome. In the event that opposing litigants in outstanding litigations or claims ultimately succeed at trial and any subsequent appeals on their claims, any potential loss or charges in excess of any established accruals, individually or in the aggregate, could have a material adverse effect on our business, financial condition, results of operations, and/or cash flows in the period in which the unfavorable outcome occurs or becomes probable, and potentially in future periods.

## ITEM 4. Mine Safety Disclosures.

Not applicable.



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## PART II

## ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

## Market Information

Our common stock has been quoted on The NASDAQ Global Select Market under the symbol "ILMN" since July 28, 2000. Prior to that time, there was no public market for our common stock. The following table sets forth, for the fiscal periods indicated, the quarterly high and low sales prices per share of our common stock as reported on The NASDAQ Global Select Market.

	2016		2015	
	High	Low	High	Low
First Quarter	\$188.25	\$130.37	\$213.33	\$178.52
Second Quarter	\$178.77	\$127.10	\$223.08	\$178.68
Third Quarter	\$182.67	\$132.65	\$242.37	\$170.29
Fourth Quarter	\$186.88	\$119.37	\$196.47	\$130.00

## Stock Performance Graph

The graph below compares the cumulative total stockholder returns on our common stock for the last five fiscal years with the cumulative total stockholder returns on the NASDAQ Composite Index, the NASDAQ Biotechnology Index, and the S&P 500 Index for the same period. The graph assumes that \$100 was invested on January 1, 2012 in our common stock and in each index and that all dividends were reinvested. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

Compare 5-Year Cumulative Total Return among Illumina, NASDAQ Composite Index, NASDAQ Biotechnology Index, and S&P 500 Index

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## Holders

As of February 3, 2017, we had 184 record holders of our common stock.

## Dividends

We have never paid cash dividends and have no present intention to pay cash dividends in the foreseeable future. The indentures for our 0% convertible senior notes due 2019 and 0.5% convertible senior notes due in 2021, which notes are convertible into cash and, in certain circumstances, shares of our common stock, require us to increase the conversion rate applicable to the notes if we pay any cash dividends.

## Purchases of Equity Securities by the Issuer

On July 28, 2016, the Company's Board of Directors authorized a new share repurchase program, which supersedes all prior and available repurchase authorizations, to repurchase \$250.0 million of outstanding common stock. The following table summarizes shares repurchased pursuant to this program during the three months ended January 1, 2017.

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs
October 3, 2016 - October 30, 2016	—	—	—	\$236,926,941
October 31, 2016 - November 27, 2016	—	—	—	\$236,926,941
November 28, 2016 - January 1, 2017	1,056,021	\$ 129.02	1,056,021	\$ 100,680,660
Total	1,056,021	\$ 129.02	1,056,021	\$ 100,680,660

(1) All shares purchased during the three months ended January 1, 2017, were made in open-market transactions.

## Sales of Unregistered Securities

None during the fiscal quarter ended January 1, 2017.

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## ITEM 6. Selected Financial Data.

The following table sets forth selected historical consolidated financial data for each of our last five fiscal years during the period ended January 1, 2017. This information should be read in conjunction with the consolidated financial statements of the Company and notes thereto included in Part II, Item 8 of this Form 10-K.

## Statement of Income Data

	Years Ended				
	January 1, 2017 (52 weeks)	January 3, 2016 (53 weeks)	December 28, 2014 (52 weeks)	December 29, 2013 (52 weeks)	December 30, 2012 (52 weeks)
	(In thousands, except per share data)				
Total revenue	\$2,398,373	\$2,219,762	\$1,861,358	\$1,421,178	\$1,148,516
Income from operations	\$587,032	\$612,841	\$514,711	\$134,107	\$200,752
Consolidated net income	\$428,090	\$457,390	\$353,351	\$125,308	\$151,254
Net income attributable to Illumina stockholders	\$462,649	\$461,559	\$353,351	\$125,308	\$151,254
Net income attributable to Illumina stockholders for earnings per share	\$454,106	\$461,526	\$353,351	\$125,308	\$151,254
Earnings per share attributable to Illumina stockholders:					
Basic	\$3.09	\$3.19	\$2.61	\$1.00	\$1.23
Diluted	\$3.07	\$3.10	\$2.37	\$0.90	\$1.13
Shares used in calculating earnings per share:					
Basic	146,788	144,826	135,553	125,076	122,999
Diluted	148,040	149,069	148,977	139,936	133,693

## Balance Sheet Data

	January 1, 2017	January 3, 2016	December 28, 2014	December 29, 2013	December 30, 2012
	(In thousands)				
Cash, cash equivalents and short-term investments	\$1,558,724	\$1,386,220	\$1,338,371	\$1,165,603	\$1,350,204
Total assets	\$4,280,600	\$3,687,747	\$3,339,640	\$3,019,006	\$2,566,085
Long-term debt, less current portion	\$1,047,805	\$1,015,649	\$986,780	\$839,305	\$805,406
Redeemable noncontrolling interest	\$43,940	\$32,546	—	—	—
Total stockholders' equity	\$2,197,229	\$1,848,553	\$1,462,798	\$1,533,202	\$1,318,581

## ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) will help readers understand our results of operations, financial condition, and cash flow. It is provided in addition to the accompanying consolidated financial statements and notes. This MD&A is organized as follows:

• **Business Overview and Outlook.** High level discussion of our operating results and significant known trends that affect our business.

• **Results of Operations.** Detailed discussion of our revenues and expenses.

• **Liquidity and Capital Resources.** Discussion of key aspects of our statements of cash flows, changes in our financial position, and our financial commitments.

Off-Balance Sheet Arrangements. We have no off-balance sheet arrangements.

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Contractual Obligations. Tabular disclosure of known contractual obligations as of January 1, 2017.

Critical Accounting Policies and Estimates. Discussion of significant changes we believe are important to understanding the assumptions and judgments underlying our financial statements.

Recent Accounting Pronouncements.

This MD&A discussion contains forward-looking statements that involve risks and uncertainties. See “Special Note Regarding Forward-Looking Statements” for additional factors relating to such statements. See “Risk Factors” in Item 1A of this report for a discussion of certain risk factors applicable to our business, financial condition, and results of operations. Operating results are not necessarily indicative of results that may occur in future periods.

## Business Overview and Outlook

Our Company is organized into three operating segments for purposes of evaluating our business operations and reviewing our financial results. One segment consists of Illumina’s core operations (Core Illumina). The other two segments relate to the activities of our consolidated variable interest entities (VIEs), GRAIL and Helix. The combined results of operations of our consolidated VIEs became material during the year ended January 1, 2017. As such, we commenced reporting two segments, Core Illumina and Consolidated VIEs, during 2016. For information on GRAIL and Helix, refer to note “12. Segment Information, Geographic Data, and Significant Customers” in Part II, Item 8 of this Form 10-K.

Our focus on innovation has established us as the global leader in sequencing- and array-based technologies, serving customers in a wide range of markets, enabling the adoption of genomic solutions in research and clinical settings.

Our customers include leading genomic research centers, academic institutions, government laboratories, and hospitals, as well as pharmaceutical, biotechnology, agrigenomics, commercial molecular diagnostic laboratories, and consumer genomics companies.

Our portfolio of integrated systems, consumables, and analysis tools is designed to accelerate and simplify genetic analysis. This portfolio addresses the range of genomic complexity, price points, and throughput, enabling customers to select the best solution for their research or clinical challenge.

Consolidated financial highlights include the following:

Net revenue increased 8.0% in 2016 over 2015 due to the growth in sales of our sequencing consumables and services, partially offset by lower shipments of our high-throughput platforms. We expect our revenue to continue to increase in 2017.

Gross profit as a percentage of revenue (gross margin) decreased to 69.5% in 2016 from 69.8% in 2015. Gross margins in 2016 decreased primarily due to our increased manufacturing capacity, which was partially offset by a greater mix of sequencing consumables. Our gross margin in future periods will depend on several factors, including: market conditions that may impact our pricing power; sales mix changes among consumables, instruments, and services; product mix changes between established products and new products in new markets; excess and obsolete inventories; royalties; our cost structure for manufacturing operations; and product support obligations.

Income from operations as a percentage of revenue decreased to 24.5% in 2016 compared to 27.6% in 2015 primarily due to the increase in research and development and selling, general, and administrative expenses as a percentage of revenue. We expect research and development and selling, general and administrative expenses to continue to grow.

Our effective tax rate was 23.7% and 21.6% in 2016 and 2015, respectively. The variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, partially offset by the tax impact associated with the investments in our consolidated variable interest entities.

Our future effective tax rate may vary from the U.S. federal statutory tax rate due to the mix of earnings in tax jurisdictions with different statutory tax rates and the other factors discussed in the risk factor “We are subject to risks related to taxation in multiple jurisdictions” in Part I Item 1A “Risk Factors” of this Form 10-K. We may



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also be adversely impacted in the future if the tax court opinion regarding the exclusion of stock compensation from cost-sharing charges is overturned. We anticipate that our effective tax rate will trend lower than the U.S. federal statutory tax rate in the future due to the portion of our earnings that will be subject to lower statutory tax rates.

We ended 2016 with cash, cash equivalents, and short-term investments totaling \$1.6 billion, of which approximately \$749.7 million was held by our foreign subsidiaries. Cash and cash equivalents held by our consolidated VIEs as of January 1, 2017 were \$75.9 million.

This overview and outlook provides a high-level discussion of our operating results and significant known trends that affect our business. We believe that an understanding of these trends is important to understanding our financial results for the periods reported herein as well as our future financial performance. This summary is not intended to be exhaustive, nor is it intended to be a substitute for the detailed discussion and analysis provided elsewhere in this Annual Report on Form 10-K.

## Results of Operations

To enhance comparability, the following table sets forth audited consolidated statement of operations data for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, stated as a percentage of total revenue.

	2016	2015	2014
Revenue:			
Product revenue	84.7 %	85.2 %	87.0 %
Service and other revenue	15.3	14.8	13.0
Total revenue	100.0	100.0	100.0
Cost of revenue:			
Cost of product revenue	22.3	22.1	23.2
Cost of service and other revenue	6.4	6.0	5.0
Amortization of acquired intangible assets	1.8	2.1	2.1
Total cost of revenue	30.5	30.2	30.3
Gross profit	69.5	69.8	69.7
Operating expense:			
Research and development	21.0	18.1	20.8
Selling, general and administrative	24.3	23.6	25.1
Legal contingencies	(0.4 )	0.9	(4.0 )
Acquisition related gain, net	—	(0.3 )	(0.1 )
Headquarter relocation	0.1	(0.1 )	0.3
Total operating expense	45.0	42.2	42.1
Income from operations	24.5	27.6	27.6
Other income (expense):			
Interest income	0.4	0.2	0.3
Interest expense	(1.4 )	(1.9 )	(2.2 )
Cost-method investment gain, net	—	0.7	0.2
Other expense, net	(0.1 )	(0.3 )	(1.8 )
Total other expense, net	(1.1 )	(1.3 )	(3.5 )
Income before income taxes	23.4	26.3	24.1
Provision for income taxes	5.6	5.7	5.1
Consolidated net income	17.8	20.6	19.0
Add: Net loss attributable to noncontrolling interests	1.5	0.2	—
Net income attributable to Illumina stockholders	19.3 %	20.8 %	19.0 %



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Our fiscal year is the 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, September 30, and December 31. Fiscal year 2016 was 52 weeks, fiscal year 2015 was 53 weeks, and fiscal year 2014 was 52 weeks.

## Revenue

(Dollars in thousands)	2016 - 2015				2015 - 2014			
	2016	2015	Change	% Change	2014	Change	% Change	
Product revenue	\$2,031,997	\$1,890,633	\$141,364	7 %	\$1,619,511	\$271,122	17 %	
Service and other revenue	366,376	329,129	37,247	11	241,847	87,282	36	
Total revenue	\$2,398,373	\$2,219,762	\$178,611	8 %	\$1,861,358	\$358,404	19 %	

Product revenue consists primarily of revenue from sales of consumables and instruments. Service and other revenue consists primarily of sequencing and genotyping service revenue as well as instrument service contract revenue. Our consolidated VIEs are in the development stage and have no revenues to date.

## 2016 Compared to 2015

Revenue increased \$178.6 million, or 8%, to \$2,398.4 million in 2016 compared to \$2,219.8 million in 2015.

Consumables revenue increased \$263.6 million, or 21%, to \$1,543.5 million in 2016 compared to \$1,279.9 million in 2015, driven by growth in the sequencing instrument installed base.

Instrument revenue decreased \$125.2 million, or 21%, to \$469.5 million in 2016 compared to \$594.7 million in 2015, primarily due to lower shipments of our high-throughput platforms.

Service and other revenue increased \$37.2 million, or 11%, to \$366.4 million in 2016 compared to \$329.1 million in 2015, driven by revenue from genotyping services and instrument service contracts associated with a larger sequencing installed base, partially offset by our NIPT customers shifting to in-house testing on our sequencers.

## 2015 Compared to 2014

Revenue increased \$358.4 million, or 19%, to \$2,219.8 million in 2015 compared to \$1,861.4 million in 2014.

Consumables revenue increased \$238.9 million, or 23%, to \$1,279.9 million in 2015 compared to \$1,041.0 million in the prior year, driven by growth in the sequencing instrument installed base.

Instrument revenue increased \$32.5 million, or 6%, to \$594.7 million in 2015 compared to \$562.2 million in the prior year, driven by shipments of HiSeq X and NextSeq systems.

Service and other revenue increased \$87.3 million, or 36%, to \$329.1 million in 2015 compared to \$241.8 million in the prior year, driven by the growth in NIPT service test volumes. Revenue from instrument service contracts also contributed to the increase as our sequencing instrument installed base continues to grow.

Overall, these increases were negatively impacted by the foreign exchange fluctuations in the comparative periods. Absent these fluctuations, revenues would have grown 23% on a constant currency basis from 2014 to 2015.

## Gross Margin

2016 - 2015

2015 - 2014

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(Dollars in thousands)	2016	2015	Change	% Change	2014	Change	% Change
Total gross profit	\$1,666,448	\$1,549,290	\$117,158	8 %	\$1,297,710	\$251,580	19 %
Total gross margin	69.5	% 69.8	%		69.7	%	

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## 2016 Compared to 2015

Gross margin decreased to 69.5% in 2016 compared to 69.8% in 2015. Gross margin decreased primarily due to our increased manufacturing capacity, which was partially offset by a greater mix of sequencing consumables.

## 2015 Compared to 2014

Gross margin increased to 69.8% compared to 69.7% in the prior year. Gross margin increased primarily due to a positive shift in product mix to sequencing consumables. Gross margin in 2014 was favorably impacted by the litigation settlement with Syntrix, which included a reversal of cost of sales of \$10.4 million. See detailed discussions on this matter in note “9. Legal Proceedings” in Part II, Item 8 of this Form 10-K.

## Operating Expense

(Dollars in thousands)	2016 - 2015				2015 - 2014			
	2016	2015	Change	% Change	2014	Change	% Change	
Research and development	\$504,415	\$401,527	\$102,888	26 %	\$388,055	\$13,472	3 %	
Selling, general and administrative	583,005	524,657	58,348	11	466,283	58,374	13	
Legal contingencies	(9,490 )	19,000	(28,490 )	(150 )	(74,338 )	93,338	(126 )	
Acquisition related gain, net	—	(6,124 )	6,124	(100 )	(2,639 )	(3,485 )	132	
Headquarter relocation	1,486	(2,611 )	4,097	(157 )	5,638	(8,249 )	(146 )	
Total operating expense	\$1,079,416	\$936,449	\$142,967	15 %	\$782,999	\$153,450	20 %	

## 2016 Compared to 2015

Research and development (R&D) expense increased by \$102.9 million, or 26%, in 2016 from 2015. Core Illumina R&D expense increased by \$59.9 million, or 15%, primarily due to increased headcount and outside services as we continue to invest in the development of new products as well as enhancements to existing products. Our consolidated VIEs contributed \$43.0 million to the increase, primarily due to \$33.7 million incurred by GRAIL.

Selling, general and administrative (SG&A) expense increased by \$58.3 million, or 11% in 2016 from 2015. Core Illumina SG&A expense increased \$35.5 million, or 7%, primarily due to headcount and facilities investment to support the continued growth and scale of our operations, as well as outside services. GRAIL and Helix contributed \$13.7 million and \$9.1 million to the increase, respectively.

Legal contingencies in 2016 represent a reversal of prior year expense related to the settlement of patent litigation.

## 2015 Compared to 2014

Research and development expense increased by \$13.5 million, or 3%, in 2015 from 2014, primarily due to increased headcount and related expenses as we continue to invest in the development of our products as well as enhancements to existing products. Research and development expense in 2014 included our litigation settlement and patent pooling agreement with Sequenom, as \$48.8 million was recorded to research and development expense for an upfront payment. See detailed discussion on this matter in note “9. Legal Proceedings” to our financial statements in Part II, Item 8 of this Form 10-K.

Selling, general and administrative expense increased by \$58.4 million, or 13%, in 2015 from 2014, primarily driven by increased headcount and consulting services to support our continued growth, investments in scaling our operations, and start-up costs related to Helix.

Legal contingencies in 2015 represent charges related to patent litigation. Legal contingencies in 2014 reflected predominantly the \$82.1 million gain from our litigation settlement with Syntrix, offset by other legal contingency charges.

Acquisition related gain, net, in 2015 and 2014 consisted of changes in fair value of contingent consideration. The changes in the fair value of the contingent consideration during the periods were primarily due to changes in the estimated payments and a shorter discounting period.

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Headquarter relocation costs for 2015 include a net gain related to a change in a lease exit liability, partially offset by accretion of interest on such liability.

## Other (Expense) Income, Net

(Dollars in thousands)	2016 - 2015				2015 - 2014			
	2016	2015	Change	% Change	2014	Change	% Change	
Interest income	\$9,799	\$5,024	\$4,775	95 %	\$3,901	\$1,123	29 %	
Interest expense	(33,181 )	(42,121 )	8,940	(21 )	(41,728 )	(393 )	1	
Cost-method investment gain, net	—	15,601	(15,601)	(100)	4,427	11,174	252	
Other expense, net	(2,472 )	(8,203 )	5,731	(70 )	(32,553 )	24,350	(75 )	
Total other expense, net	\$(25,854)	\$(29,699)	\$3,845	(13 )%	\$(65,953)	\$36,254	(55 )%	

## 2016 Compared to 2015

Interest income increased in 2016 compared to 2015 as a result of higher yields on our investments and higher savings and money market balances. Interest expense consisted primarily of accretion of discount on our convertible senior notes. The decrease in interest expense in 2016 compared to 2015 was due to a lower outstanding principal balance on the 2016 Notes, which matured in March 2016.

Other expense, net, in 2016 is primarily attributable to \$1.0 million related to equity method investment losses and \$0.9 million in net foreign exchange loss. Other expense, net, in 2015 consisted primarily of \$4.3 million in net foreign exchange loss and a \$4.1 million loss on extinguishment of debt.

## 2015 Compared to 2014

Interest income primarily consisted of returns from our investment portfolio. Interest income increased slightly in 2015 compared to 2014 as a result of higher yields and higher investment balances throughout the period. Interest expense consisted primarily of accretion of discount on our convertible senior notes. The increase in interest expense in 2015 compared to 2014 was due to the issuance of our 2019 and 2021 Notes in June 2014, partially offset by the impact from the concurrent repurchase of \$600.0 million in principal amount of our 2016 Notes.

Cost-method investment gain, net in 2015 consisted primarily of gains on dispositions of cost-method investments, partially offset by impairment charges on other investments.

Other expense, net, in 2015 consisted primarily of \$4.3 million in foreign exchange loss and \$4.1 million in loss on extinguishment of our 2016 notes. Other expense, net, in 2014, was negatively impacted by \$31.4 million loss on extinguishment of debt recorded as a result of the repurchase of \$600.0 million in principal amount of our 2016 Notes.

## Provision for Income Taxes

(Dollars in thousands)	2016 - 2015				2015 - 2014			
	2016	2015	Change	% Change	2014	Change	% Change	
Income before income taxes	\$561,178	\$583,142	\$(21,964)	(4 )%	\$448,758	\$134,384	30 %	
Provision for income taxes	133,088	125,752	7,336	6	95,407	30,345	32	
Consolidated net income	\$428,090	\$457,390	\$(29,300)	(6 )%	\$353,351	\$104,039	29 %	
Effective tax rate	23.7	% 21.6	%		21.3	%		

2016 Compared to 2015

Our effective tax rate was 23.7% and 21.6% in 2016 and 2015, respectively. In 2016, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom, partially offset by the tax impact associated with the investments in our consolidated variable interest entities. In 2015, the variance from the U.S. federal statutory tax rate of 35% was primarily attributable to a discrete tax benefit of \$24.8 million, related to the exclusion of stock compensation from



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prior period cost-sharing charges as a result of a tax court opinion in which an unrelated third party was successful in challenging such charges. The decrease from the U.S. federal statutory tax rate also resulted from the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as in Singapore and the United Kingdom.

### 2015 Compared to 2014

Our effective tax rate was 21.6% and 21.3% in 2015 and 2014, respectively. In 2015, the variance from the U.S. federal statutory tax rate of 35% was attributable to a discrete tax benefit of \$24.8 million, related to the exclusion of stock compensation from prior period cost-sharing charges as a result of a tax court opinion in which an unrelated third party was successful in challenging such charges. In 2015 and 2014, the variance from the U.S. federal statutory tax rate of 35% was also attributable to the mix of earnings in jurisdictions with lower statutory tax rates than the U.S. federal statutory tax rate, such as Singapore and the United Kingdom.

### Liquidity and Capital Resources

At January 1, 2017, we had approximately \$734.5 million in cash and cash equivalents, of which approximately \$444.2 million was held by our foreign subsidiaries. Cash and cash equivalents held by our consolidated VIEs as of January 1, 2017 were \$75.9 million. Cash and cash equivalents decreased by \$34.3 million from last year, due to the factors described in the “Cash Flow Summary” below. Our primary source of liquidity, other than our holdings of cash, cash equivalents, and investments, has been cash flows from operations. Our ability to generate cash from operations provides us with the financial flexibility we need to meet operating, investing, and financing needs. It is our intention to indefinitely reinvest all current and future foreign earnings in foreign subsidiaries.

Historically, we have liquidated our short-term investments and/or issued debt and equity securities to finance our business needs as a supplement to cash provided by operating activities. As of January 1, 2017, we had \$824.2 million in short-term investments. Short-term investments held by our foreign subsidiaries as of January 1, 2017 were approximately \$305.5 million. Our short-term investments include marketable securities consisting of U.S. government-sponsored entities, corporate debt securities, and U.S. Treasury securities.

During 2016, \$75.5 million in principal of the 2016 Notes were converted. The 2016 Notes became convertible on April 1, 2014 through, and including, March 11, 2016. All 2016 Notes were converted by March 11, 2016. The convertible senior notes due 2019 and 2021 were not convertible as of January 1, 2017.

We anticipate that our current cash, cash equivalents, and short-term investments, together with cash provided by operating activities are sufficient to fund our near term capital and operating needs for at least the next 12 months. Operating needs include the planned costs to operate our business, including amounts required to fund working capital and capital expenditures. Our primary short-term needs for capital, which are subject to change, include:

- support of 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;
- acquisitions of equipment and other fixed assets for use in our current and future manufacturing and research and development facilities;
- the continued advancement of research and development efforts;
- potential strategic acquisitions and investments;
- potential early repayment of debt obligations as a result of conversions;
- the expansion needs of our facilities, including costs of leasing and building out additional facilities; and
- repurchases of our outstanding common stock.

During 2016, we used \$249.3 million to repurchase our outstanding shares under the stock repurchase program authorized by our Board of Directors. As of January 1, 2017, \$100.7 million remains under the authorized program.

Certain noncontrolling Helix investors may require Illumina to redeem all noncontrolling interests in cash at the then approximate fair market value. Such redemption right is exercisable at the option of certain noncontrolling interest holders after January 1, 2021, provided that a bona fide pursuit of the sale of Helix has occurred and an initial public offering of Helix

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has not been completed. The fair value of the redeemable noncontrolling interests related to Helix as of January 1, 2017, was \$42.6 million.

On April 14, 2016, we announced our commitment to invest \$100.0 million in a new venture capital investment fund (Venture Fund) established by Nicholas Naclerio, Ph.D., our former Senior Vice President, Corporate and Venture Development. The capital commitment is callable over ten years, and up to \$40.0 million can be drawn down during the first year. During 2016, the Company transferred \$3.2 million of its cost-method investments to the Venture Fund and contributed \$7.4 million in cash.

We expect that our 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 future capital requirements and the adequacy of our available funds will depend on many factors, including:

- our ability to successfully commercialize and further develop our technologies and create innovative products in our markets;
- 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.

## Cash Flow Summary

(In thousands)	2016	2015	2014
Net cash provided by operating activities	\$687,238	\$659,596	\$501,271
Net cash used in investing activities	(514,539 )	(106,146 )	(406,624 )
Net cash used in financing activities	(204,713 )	(418,762 )	(166,748 )
Effect of exchange rate changes on cash and cash equivalents	(2,240 )	(2,072 )	(3,382 )
Net (decrease) increase in cash and cash equivalents	\$(34,254 )	\$132,616	\$(75,483 )

## Operating Activities

Net cash provided by operating activities in 2016 consisted of net income of \$428.1 million plus net adjustments of \$304.2 million partially offset by net changes in net operating assets and liabilities of \$45.0 million. The primary non-cash expenses added back to net income included depreciation and amortization expenses of \$140.9 million, share-based compensation of \$129.1 million, deferred income taxes of \$93.6 million, accretion of debt discount of \$29.7 million, and gain on litigation settlement of \$(11.5) million. These non-cash add-backs were partially offset by \$91.3 million in incremental tax benefit related to share-based compensation. Cash flow impact from changes in net operating assets and liabilities were primarily driven by an increase in inventory and a decrease in accrued liabilities.

Net cash provided by operating activities in 2015 consisted of net income of \$457.4 million plus net adjustments of \$240.6 million partially offset by net changes in net operating assets and liabilities of \$38.4 million. The primary non-cash expenses added back to net income included share-based compensation of \$132.6 million, depreciation and amortization expenses of \$126.4 million, deferred income taxes of \$80.5 million, and accretion of debt discount of \$38.5 million. These non-cash add-backs were partially offset by \$126.7 million in incremental tax benefit related to share-based compensation, \$15.6 million in cost-method investment gain, net and \$6.1 million in change in fair value of contingent consideration. Cash flow impact from changes in net operating assets included increases in accounts receivable, inventory, and prepaid expenses and other current assets, partially offset by increases in accounts payable, accrued liabilities, and accrued legal contingencies.

Net cash provided by operating activities in 2014 consisted of net income of \$353.4 million plus net adjustments of \$204.4 million, partially offset by net changes in net operating assets and liabilities of \$56.5 million. The primary non-cash expenses added back to net income included share-based compensation of \$152.6 million, depreciation and amortization expenses of \$112.6 million, deferred income taxes of \$99.8 million, accretion of debt discount of \$38.1 million, and loss on extinguishment of debt of \$31.4 million. These non-cash add backs were partially offset by \$126.5 million in incremental tax benefit related to share-based compensation and \$109.4 million in gain on litigation settlement. Cash flow impact from changes in net operating assets included increases in accounts receivable, inventory, other assets, and a decrease in accrued legal contingencies, partially offset by an increase in accrued liabilities.

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### Investing Activities

Net cash used in investing activities totaled \$514.5 million in 2016. We purchased \$894.4 million of available-for-sale securities and \$682.9 million of our available-for-sale securities matured or were sold during the period. We also paid net cash of \$17.8 million for acquisitions, \$13.8 million for strategic investments, \$11.5 million for intangibles, and invested \$259.9 million in capital expenditures primarily associated with facilities and the purchase of manufacturing, research and development equipment.

Net cash used in investing activities totaled \$106.1 million in 2015. We purchased \$797.0 million of available-for-sale securities and \$876.8 million of our available-for-sale securities matured or were sold during the period. We also paid net cash of \$36.6 million for acquisitions and invested \$142.8 million in capital expenditures primarily associated with machinery and equipment, facilities, and information technology equipment and systems primarily related to our enterprise resource planning system implementation.

Net cash used in investing activities totaled \$406.6 million in 2014. We purchased \$791.3 million of available-for-sale securities and \$541.9 million of our available-for-sale securities matured or were sold during the period. We also invested \$106.0 million in capital expenditures primarily associated with the purchase of manufacturing, research and development equipment, leasehold improvements, and information technology equipment and systems.

### Financing Activities

Net cash used in financing activities totaled \$204.7 million in 2016. We used \$99.8 million to pay taxes related to net share settlement of equity awards, \$29.2 million to pay acquisition related contingent consideration, and \$249.3 million to repurchase our common stock. We used \$65.9 million to repay financing obligations. We received \$91.3 million in incremental tax benefit related to share-based compensation and \$47.7 million in proceeds from the issuance of common stock through the exercise of stock options and under our employee stock purchase plan. Contributions from noncontrolling owners were \$89.0 million.

Net cash used in financing activities totaled \$418.8 million in 2015. We used \$127.2 million to pay taxes related to net share settlement of equity awards and \$274.3 million to repurchase our common stock. We used \$245.0 million to repay financing obligations. We received \$126.7 million in incremental tax benefit related to share-based compensation and \$71.8 million in proceeds from the issuance of common stock through the exercise of stock options and under our employee stock purchase plan. Contributions from noncontrolling owners were \$32.1 million.

Net cash used in financing activities totaled \$166.7 million in 2014. We received \$1,132.4 million in proceeds from the issuance of \$1,150.0 million in principal amount of our convertible senior notes due 2019 and 2021, net of issuance costs paid in the period. We used \$1,244.7 million to repurchase \$600.0 million in principal amount of our 2016 Notes and used \$237.2 million to repurchase our common stock. In addition, we paid \$30.0 million primarily in conversions of our convertible senior notes due 2014. We received \$126.5 million in incremental tax benefit related to share-based compensation and \$96.3 million in proceeds from the issuance of common stock through the exercise of stock options and the sale of shares under our employee stock purchase plan.

### Off-Balance Sheet Arrangements

We do not participate in any transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. During the fiscal year ended January 1, 2017, we were not involved in any “off-balance sheet arrangements”

within the meaning of the rules of the Securities and Exchange Commission.

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## Contractual Obligations

Contractual obligations represent future cash commitments and liabilities under agreements with third parties, and exclude orders for goods and services entered into in the normal course of business that are not enforceable or legally binding. The following table represents our contractual obligations as of January 1, 2017, aggregated by type (amounts in thousands):

Contractual Obligation	Total	Payments Due by Period(1)			
		Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years
Debt obligations(2)	\$1,161,644	\$2,588	\$637,675	\$521,381	\$—
Operating leases	661,931	42,759	91,981	91,586	435,605
Build-to-suit leases	376,857	12,244	53,297	56,488	254,828
License agreements	77,225	12,920	41,155	23,150	—
Purchase obligations	22,458	18,503	3,955	—	—
Amounts due under executive deferred compensation plan	29,223	29,223	—	—	—
Contingent consideration payments related to acquisitions	4,139	—	4,139	—	—
Total	\$2,333,477	\$118,237	\$832,202	\$692,605	\$690,433

(1) The table excludes \$65.0 million of uncertain tax positions, \$43.9 million of redeemable noncontrolling interest, and \$89.5 million of capital commitments for the Venture Fund as the timing and amounts of the settlement remained uncertain as of January 1, 2017. See note “10. Income Taxes” and note “2. Balance Sheet Account Details” in Part II, Item 8 of this Form 10-K for further discussions of these items.

(2) Debt obligations include the principal amount of our convertible senior notes due 2019 and 2021, as well as interest payments to be made under the notes. Although these notes mature in 2019 and 2021, respectively, they may be converted into cash and shares of our common stock prior to maturity if certain conditions are met. Any conversion prior to maturity can result in repayments of the principal amounts sooner than the scheduled repayments as indicated in the table. See note “5. Convertible Senior Notes” in Part II, Item 8 of this Form 10-K for further discussion of the terms of the convertible senior notes.

## Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Management bases its estimates on historical experience, market and other conditions, and various other assumptions it believes to be reasonable. Although these estimates are based on management’s best knowledge of current events and actions that may impact us in the future, the estimation process is, by its nature, uncertain given that estimates depend on events over which we may not have control. If market and other conditions change from those that we anticipate, our consolidated financial statements may be materially affected. In addition, if our assumptions change, we may need to revise our estimates, or take other corrective actions, either of which may also have a material effect on our consolidated financial statements.

We believe that the following critical accounting policies and estimates have a higher degree of inherent uncertainty and require our most significant judgments. In addition, had we used estimates different from any of these, our consolidated financial statements could have been materially different from those presented. Members of our senior management have discussed the development and selection of our critical accounting policies and estimates, and our

disclosure regarding them, with the audit committee of our board of directors. Our accounting policies are more fully described in note “1. Organization and Significant Accounting Policies” in Part II, Item 8 of this Form 10-K.



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### Revenue Recognition

Our revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and consumables used in genetic analysis. Service and other revenue primarily consists of revenue generated from genotyping and sequencing services and instrument service contracts. The timing of revenue recognition and the amount of revenue recognized in each case depends upon a variety of factors, including the specific terms of each arrangement and the nature of our deliverables and obligations. Determination of the appropriate amount of revenue recognized involves significant judgment and estimates.

We recognize 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. We occasionally offer discounts on newly introduced products to recent customers of existing products. These promotions sometimes involve the trade-in of existing products in exchange for a discount on new products. Where applicable, we defer a portion of revenue on the sales of existing products in recognition of the promotional discounts until the delivery of new products. All revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities.

Revenue from product sales is recognized generally upon transfer of title to the customer, provided that no significant obligations remain and collection of the receivable is reasonably assured. Revenue from instrument service contracts is recognized as the services are rendered, typically evenly over the contract term. Revenue from genotyping and sequencing services is recognized when earned, which is generally at the time the genotyping or sequencing analysis data is made available to the customer or agreed upon milestones are reached.

In order to assess whether the price is fixed or determinable, we evaluate whether an arrangement is cancellable or subject to future changes in price, deliverables, or other terms. If it is determined that the price is not fixed or determinable, we defer revenue recognition until the price becomes fixed or determinable. We assess collectibility based on a number of factors, including past transaction history with, and the creditworthiness of, the customer. If we determine that collection of a payment is not reasonably assured, revenue recognition is deferred until receipt of payment.

We regularly enter into contracts where revenue is derived from multiple deliverables including products or services. These products or services are generally delivered within a short time frame, approximately three to six months, after the contract execution date. Revenue recognition for contracts with multiple deliverables is based on the individual units of accounting determined to exist in the contract. A delivered item is considered a separate unit of accounting when the delivered item has value to the customer on a stand-alone basis. 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.

For transactions with multiple deliverables, consideration is allocated at the inception of the contract to all deliverables based on their relative selling price. The relative selling price for each deliverable is determined using vendor specific objective evidence (VSOE) of selling price or third-party evidence of selling price if VSOE does not exist. If neither VSOE nor third-party evidence exists, we use best estimate of the selling price for the deliverable.

In order to establish VSOE of selling price, we must regularly sell the product or service on a standalone basis with a substantial majority priced within a relatively narrow range. VSOE of selling price is usually the midpoint of that range. If there are not a sufficient number of standalone sales and VSOE of selling price cannot be determined, then we consider whether third party evidence can be used to establish selling price. Due to the lack of similar products and services sold by other companies within the industry, we have rarely established selling price using third-party evidence. If neither VSOE nor third party evidence of selling price exists, we determine our best estimate of selling

price using average selling prices over a rolling 12-month period coupled with an assessment of current market conditions. If the product or service has no history of sales or if the sales volume is not sufficient, we rely upon prices set by our pricing committee adjusted for applicable discounts. We recognize revenue for delivered elements only when we determine there are no uncertainties regarding customer acceptance.

In certain markets, we sell products and provide services to customers through distributors that specialize in life science products. In most sales through distributors, the product is delivered directly to customers. In cases where the product is delivered to a distributor, revenue recognition is deferred until acceptance is received from the distributor, and/or the end-user, if required by the applicable sales contract. The terms of sales transactions through distributors are consistent with the terms of direct sales to customers. These transactions are accounted for in accordance with our revenue recognition policy described herein.

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### Investments

We invest in various types of securities, including debt securities in government-sponsored entities, corporate debt securities, and U.S. Treasury securities. As of January 1, 2017, we had \$824.2 million in short-term investments. In accordance with the accounting standard for fair value measurements, we classify our investments as Level 1, 2, or 3 within the fair value hierarchy. Fair values determined by Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets that we have the ability to access. Fair values determined by Level 2 inputs utilize data points that are observable such as quoted prices, interest rates and yield curves. Fair values determined by Level 3 inputs utilize unobservable data points for the asset.

As discussed in note “4. Fair Value Measurements” in Part II, Item 8 of this Form 10-K, a majority of our security holdings have been classified as Level 2. These securities have been initially valued at the transaction price and subsequently valued utilizing a third party service provider who assesses the fair value using inputs other than quoted prices that are observable either directly or indirectly, such as yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures. We perform certain procedures to corroborate the fair value of these holdings, and in the process, we apply judgment and estimates that if changed, could significantly affect our statement of financial positions.

### 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, review historical loss rates and assess current economic trends that may impact the level of credit losses in the future. Our allowance for doubtful accounts has generally been adequate to cover our actual credit losses. However, since we cannot reliably predict future changes in the financial stability of our customers, we may need to increase our reserves if the financial conditions of our customers deteriorate.

### Inventory Valuation

Inventories are stated at lower of cost or market. 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 cycles, quality issues, historical experience, and usage forecasts. Our gross inventory totaled \$344.5 million and the cumulative adjustment for potentially excess and obsolete inventory was \$44.3 million at January 1, 2017. Historically, our inventory adjustment has been adequate to cover our losses. However, if actual market conditions are less favorable than anticipated, additional inventory adjustments could be required.

### Contingencies

We are involved in various lawsuits and claims arising in the ordinary course of business, including actions with respect to intellectual property, employment, and contractual matters. In connection with these matters, we assess, on a regular basis, the probability and range of possible loss based on the developments in these matters. A liability is recorded in the financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable resolutions could occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review outstanding legal matters to determine the adequacy of the liabilities accrued and related disclosures in consideration

of many factors, which include, but are not limited to, past history, scientific and other evidence, and the specifics and status of each matter. We may change our estimates if our assessment of the various factors changes and the amount of ultimate loss may differ from our estimates, resulting in a material effect on our business, financial condition, results of operations, and/or cash flows.

#### Business Combinations

Under the acquisition method of accounting, we allocate the fair value of the total consideration transferred to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values on the date of acquisition. The fair values assigned, defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants, are based on estimates and assumptions determined by management. We record the excess consideration over the aggregate fair value of tangible and intangible assets, net of liabilities assumed, as goodwill. These valuations require us to make significant estimates and assumptions, especially with

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respect to intangible assets.

In connection with certain of our acquisitions, additional contingent consideration is earned by the sellers upon completion of certain future performance milestones. In these cases, a liability is recorded on the acquisition date for an estimate of the acquisition date fair value of the contingent consideration by applying the income approach utilizing variable inputs such as anticipated future cash flows, risk-free adjusted discount rates, and nonperformance risk. Any change in the fair value of the contingent consideration subsequent to the acquisition date is recognized in acquisition related (gain) expense, net, a component of operating expenses, in our consolidated statements of income. This method requires significant management judgment, including the probability of achieving certain future milestones and discount rates. Future changes in our estimates could result in expenses or gains.

Management typically uses the discounted cash flow method to value our acquired intangible assets. This method requires significant management judgment to forecast future operating results and establish residual growth rates and discount factors. The estimates we use to value and amortize intangible assets are consistent with the plans and estimates that we use to manage our business and are based on available historical information and industry estimates and averages. If the subsequent actual results and updated projections of the underlying business activity change compared with the assumptions and projections used to develop these values, we could experience impairment charges. In addition, we have estimated the economic lives of certain acquired assets and these lives are used to calculate depreciation and amortization expense. If our estimates of the economic lives change, depreciation or amortization expenses could be accelerated or slowed.

### Intangible Assets and Other Long-Lived Assets — Impairment Assessments

We regularly perform reviews to determine if the carrying values of our long-lived assets are impaired. A review of identifiable intangible assets and other long-lived assets is performed when an event occurs indicating the potential for impairment. If indicators of impairment exist, we assess the recoverability of the affected long-lived assets and compare their fair values to the respective carrying amounts.

In order to estimate the fair value of identifiable intangible assets and other long-lived assets, we estimate the present value of future cash flows from those assets. The key assumptions that we use in our discounted cash flow model are the amount and timing of estimated future cash flows to be generated by the asset over an extended period of time and a rate of return that considers the relative risk of achieving the cash flows, the time value of money, and other factors that a willing market participant would consider. Significant judgment is required to estimate the amount and timing of future cash flows and the relative risk of achieving those cash flows.

Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. For example, if our future operating results do not meet current forecasts or if we experience a sustained decline in our market capitalization that is determined to be indicative of a reduction in fair value of our reporting unit, we may be required to record future impairment charges for purchased intangible assets. Impairment charges could materially decrease our future net income and result in lower asset values on our balance sheet.

### Share-Based Compensation

We are required to measure and recognize compensation expense for all share-based payments based on estimated fair value. We estimate the fair value of stock options granted and stock purchases under our employee stock purchase plan using the Black-Scholes-Merton (BSM) option-pricing model. The fair value of our restricted stock units is based on the market price of our common stock on the date of grant.

The determination of fair value of share-based awards requires the use of certain estimates and highly judgmental assumptions that affect the amount of share-based compensation expense recognized in our consolidated statements of income. These include estimates of the expected volatility of our stock price, expected life of an award, expected dividends, the risk-free interest rate, and forecast of our future financial performance, in the case of performance stock units. We determine the volatility of our stock price by equally weighing the historical and implied volatility of our common stock. The historical volatility of our common stock over the most recent period is generally commensurate with the estimated expected life of our stock awards, adjusted for the impact of unusual fluctuations not reasonably expected to recur, and other relevant factors. Implied volatility is calculated from the implied market volatility of exchange-traded call options on our common stock. The expected life of an award is based on historical forfeiture experience, exercise activity, and on the terms and conditions of the stock awards. We determined expected dividend yield to be 0% given we have never declared or paid any cash dividends on our common stock and we currently do not anticipate paying such cash dividends. The risk-free interest rate is based upon

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U.S. Treasury securities with remaining terms similar to the expected term of the share-based awards. We update our forecast of future financial performance periodically, which impacts our estimate of the number of shares to be issued pursuant to the outstanding performance stock units. We amortize the fair value of share-based compensation on a straight-line basis over the requisite service periods of the awards. If any of the assumptions used change significantly, share-based compensation expense may differ materially from what we have recorded in the current period.

### Warranties

We generally provide a one-year warranty on instruments. Additionally, we provide a warranty on consumables through the expiration date, which generally ranges from six to twelve months after the manufacture date. We establish an accrual for estimated warranty expenses based on historical experience as well as anticipated product performance. We periodically review the adequacy of our warranty reserve, and adjust, if necessary, the warranty percentage and accrual based on actual experience and estimated costs to be incurred. If our estimates of warranty obligation change or if actual product performance is below our expectations we may incur additional warranty expense.

### Cease-Use Loss upon Exit of Facility

We may, from time to time, relocate or consolidate our office locations and cease to use a facility for which the lease continues beyond the cease-use date. We estimate cease-use loss as the present value of the remaining lease obligation offset by estimated sublease rental receipts during the remaining lease period, adjusted for deferred items and leasehold improvements. In this process, management is required to make significant judgments to estimate the present value of future cash flows from the assumed sublease, including the amount and timing of estimated sublease rental receipts, and the risk-adjusted discount rate. These assumptions are subjective in nature and the actual future cash flows could differ from our estimates, resulting in significant adjustments to the cease-use loss recorded.

### Income Taxes

Our provision for income taxes, deferred tax assets and liabilities, and reserves for unrecognized tax benefits reflect our best assessment of estimated future taxes to be paid. Significant judgments and estimates based on interpretations of existing tax laws or regulations in the United States and the numerous foreign jurisdictions where we are subject to income tax are required in determining our provision for income taxes. Changes in tax laws, statutory tax rates, and estimates of our future taxable income could impact the deferred tax assets and liabilities provided for in the consolidated financial statements and would require an adjustment to the provision for income taxes.

Deferred tax assets are regularly assessed to determine the likelihood they will be recovered from future taxable income. A valuation allowance is established when we believe it is more likely than not the future realization of all or some of a deferred tax asset will not be achieved. In evaluating our ability to recover deferred tax assets within the jurisdiction which they arise, we consider all available positive and negative evidence. Factors reviewed include the cumulative pre-tax book income for the past three years, scheduled reversals of deferred tax liabilities, our history of earnings and reliability of our forecasts, projections of pre-tax book income over the foreseeable future, and the impact of any feasible and prudent tax planning strategies. Based on the available evidence as of January 1, 2017, we were not able to conclude it is more likely than not certain deferred tax assets will be realized. Therefore, we recorded a valuation allowance of \$18.1 million against certain U.S. and foreign deferred tax assets.

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. Tax authorities regularly examine our returns in the jurisdictions in which we do business and we regularly assess the tax risk of our return filing positions. Due to the complexity of some of the uncertainties, the ultimate resolution may result in

payments that are materially different from our current estimate of the tax liability. These differences, as well as any interest and penalties, will be reflected in the provision for income taxes in the period in which they are determined.

#### Recent Accounting Pronouncements

For summary of recent accounting pronouncements applicable to our consolidated financial statement see note “1. Organization and Summary of Significant Accounting Policies” in Part II, Item 8, Notes to Consolidated Financial Statements, which is incorporated herein by reference.



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ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Sensitivity

Our investment portfolio is exposed to market risk from changes in interest rates. 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.

Changes in interest rates may impact gains or losses from the conversion of our outstanding convertible senior notes. In June 2014, we issued \$632.5 million aggregate principal amount of 0% convertible senior notes due 2019 (2019 Notes) and \$517.5 million aggregate principal amount of 0.5% convertible senior notes due 2021 (2021 Notes). At our election, the notes are convertible into cash, shares of our common stock, or a combination of cash and shares of our common stock under certain circumstances, including trading price conditions related to our common stock. If the trading price of our common stock reaches a price at 130% above the conversion price, the notes will become convertible. Upon conversion, we are required to record a gain or loss for the difference between the fair value of the debt to be extinguished and its corresponding net carrying value. The fair value of the debt to be extinguished depends on our then-current incremental borrowing rate. If our incremental borrowing rate at the time of conversion is higher or lower than the implied interest rate of the notes, we will record a gain or loss in our consolidated statement of income during the period in which the notes are converted. The implicit interest rates for the 2019 and 2021 Notes were 2.9% and 3.5%, respectively. An incremental borrowing rate that is a hypothetical 100 basis points lower than the implicit interest rate upon conversion of \$100.0 million aggregate principal amount of each of the 2019 and 2021 Notes would result in losses of approximately \$2.5 million and \$4.1 million, respectively.

Foreign Currency Exchange Risk

We conduct a portion of our business in currencies other than the company's U.S. dollar functional currency. These transactions give rise to monetary assets and liabilities that are denominated in currencies other than the U.S. dollar. The value of these monetary assets and liabilities are subject to changes in currency exchange rates from the time the transactions are originated until settlement in cash. Our foreign currency exposures are primarily concentrated in the Euro, Yen, and Australian dollar. Both realized and unrealized gains or losses on the value of these monetary assets and liabilities are included in the determination of net income.

We use forward exchange contracts to manage foreign currency risks related to monetary assets and liabilities denominated in currencies other than the U.S. dollar. We only use derivative financial instruments to reduce foreign currency exchange rate risks; we do not hold any derivative financial instruments for trading or speculative purposes. We primarily use forward exchange contracts to hedge foreign currency exposures, and they generally have terms of one month or less. Realized and unrealized gains or losses on the value of financial contracts entered into to hedge the exchange rate exposure of these monetary assets and liabilities are also included in the determination of net income, as they have not been designated for hedge accounting. These contracts, which settle monthly, effectively fix the exchange rate at which these specific monetary assets and liabilities will be settled, so that gains or losses on the forward contracts offset the gains or losses from changes in the value of the underlying monetary assets and liabilities. As of January 1, 2017, the total notional amount of outstanding forward contracts in place for foreign currency purchases was \$68.8 million.



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ITEM 8. Financial Statements and Supplementary Data.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of  
Illumina, Inc.

We have audited the accompanying consolidated balance sheets of Illumina, Inc. as of January 1, 2017 and January 3, 2016, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three fiscal years in the period ended January 1, 2017. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Illumina, Inc. at January 1, 2017 and January 3, 2016, and the consolidated results of its operations and its cash flows for each of the three fiscal years in the period ended January 1, 2017, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Illumina, Inc.'s internal control over financial reporting as of January 1, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 13, 2017 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California

February 13, 2017

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ILLUMINA, INC.  
CONSOLIDATED BALANCE SHEETS  
(in thousands, except par value)

	January 1, 2017	January 3, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$734,516	\$768,770
Short-term investments	824,208	617,450
Accounts receivable, net	381,316	385,529
Inventory	300,170	270,777
Prepaid expenses and other current assets	77,881	54,297
Total current assets	2,318,091	2,096,823
Property and equipment, net	713,334	342,694
Goodwill	775,995	752,629
Intangible assets, net	242,652	273,621
Deferred tax assets	123,317	134,515
Other assets	107,211	87,465
Total assets	\$4,280,600	\$3,687,747
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$137,930	\$139,226
Accrued liabilities	342,751	386,844
Build-to-suit lease liability	222,734	9,495
Long-term debt, current portion	1,250	74,929
Total current liabilities	704,665	610,494
Long-term debt	1,047,805	1,015,649
Other long-term liabilities	213,955	180,505
Commitments and contingencies		
Redeemable noncontrolling interests	43,940	32,546
Stockholders' equity:		
Preferred stock, \$0.01 par value, 10,000 shares authorized; no shares issued and outstanding at January 1, 2017 and January 3, 2016	—	—
Common stock, \$0.01 par value, 320,000 shares authorized; 188,759 shares issued and 146,196 outstanding at January 1, 2017; 186,663 shares issued and 146,584 outstanding at January 3, 2016	1,887	1,859
Additional paid-in capital	2,733,394	2,497,501
Accumulated other comprehensive (loss) income	(1,037	) 36
Retained earnings	1,485,414	1,022,765
Treasury stock, 42,563 shares and 40,079 shares at cost at January 1, 2017 and January 3, 2016, respectively	(2,022,429	) (1,673,608 )
Total Illumina stockholders' equity	2,197,229	1,848,553
Noncontrolling interests	73,006	—
Total stockholders' equity	2,270,235	1,848,553
Total liabilities and stockholders' equity	\$4,280,600	\$3,687,747

See accompanying notes to consolidated financial statements.



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ILLUMINA, INC.  
CONSOLIDATED STATEMENTS OF INCOME  
(In thousands, except per share amounts)

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Revenue:			
Product revenue	\$2,031,997	\$1,890,633	\$1,619,511
Service and other revenue	366,376	329,129	241,847
Total revenue	2,398,373	2,219,762	1,861,358
Cost of revenue:			
Cost of product revenue	534,199	490,812	431,920
Cost of service and other revenue	154,762	133,850	92,355
Amortization of acquired intangible assets	42,964	45,810	39,373
Total cost of revenue	731,925	670,472	563,648
Gross profit	1,666,448	1,549,290	1,297,710
Operating expense:			
Research and development	504,415	401,527	388,055
Selling, general and administrative	583,005	524,657	466,283
Legal contingencies	(9,490)	) 19,000	(74,338)
Acquisition related gain, net	—	(6,124)	) (2,639)
Headquarter relocation	1,486	(2,611)	) 5,638
Total operating expense	1,079,416	936,449	782,999
Income from operations	587,032	612,841	514,711
Other income (expense):			
Interest income	9,799	5,024	3,901
Interest expense	(33,181)	) (42,121)	) (41,728)
Cost-method investment gain, net	—	15,601	4,427
Other expense, net	(2,472)	) (8,203)	) (32,553)
Total other expense, net	(25,854)	) (29,699)	) (65,953)
Income before income taxes	561,178	583,142	448,758
Provision for income taxes	133,088	125,752	95,407
Consolidated net income	428,090	457,390	353,351
Add: Net loss attributable to noncontrolling interests	34,559	4,169	—
Net income attributable to Illumina stockholders	\$462,649	\$461,559	\$353,351
Net income attributable to Illumina stockholders for earnings per share	\$454,106	\$461,526	\$353,351
Earnings per share attributable to Illumina stockholders:			
Basic	\$3.09	\$3.19	\$2.61
Diluted	\$3.07	\$3.10	\$2.37
Shares used in computing earnings per common share:			
Basic	146,788	144,826	135,553
Diluted	148,040	149,069	148,977

See accompanying notes to consolidated financial statements.

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ILLUMINA, INC.  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
 (In thousands)

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Consolidated net income	\$428,090	\$ 457,390	\$ 353,351
Unrealized (loss) gain on available-for-sale securities, net of deferred tax	(1,073 )	1,116	(2,314 )
Total consolidated comprehensive income	427,017	458,506	351,037
Add: Comprehensive loss attributable to noncontrolling interests	34,559	4,169	—
Comprehensive income attributable to Illumina stockholders	\$461,576	\$ 462,675	\$ 351,037
See accompanying notes to consolidated financial statements.			



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CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Illumina Stockholders			Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Treasury Stock		Noncontrolling Interests	Total Stockholders' Equity
	Common Shares	Paid-In Capital	Additional			Shares	Amount		
	(in thousands)								
Balance as of December 29, 2013	175,205	\$ 1,753	\$ 2,562,705	\$ 1,234	\$ 207,855	(47,482)	\$(1,240,345)	\$—	\$ 1,533,202
Net income	—	—	—	—	353,351	—	—	—	353,351
Unrealized loss on available-for-sale securities, net of deferred tax	—	—	—	(2,314 )	—	—	—	—	(2,314 )
Issuance of common stock, net of repurchases	6,127	52	96,204	—	—	(2,696 )	(247,221 )	—	(150,965 )
Tax impact from the issuance, repurchase and conversion of convertible notes	—	—	(58,354 )	—	—	—	—	—	(58,354 )
Reclassification of conversion option subject to cash settlement	—	—	282	—	—	—	—	—	282
Share-based compensation	—	—	153,189	—	—	—	—	—	153,189
Net incremental tax benefit related to share-based compensation	—	—	126,477	—	—	—	—	—	126,477
Equity based contingent compensation	—	—	2,621	—	—	—	—	—	2,621
Warrant exercises	—	—	(215,493 )	—	—	12,475	215,493	—	—
Repurchase of convertible notes, net of issuances	—	—	(494,691 )	—	—	—	—	—	(494,691 )
Balance as of December 28, 2014	181,332	1,805	2,172,940	(1,080 )	561,206	(37,703)	(1,272,073 )	—	1,462,798
Net income	—	—	—	—	461,559	—	—	—	461,559
Unrealized gain on	—	—	—	1,116	—	—	—	—	1,116

available-for-sale securities, net of deferred tax									
Issuance of common stock, net of repurchases	5,331	54	69,870	—	—	(2,376 )	(401,535 )	—	(331,611 )
Tax impact from the conversion of convertible notes	—	—	373	—	—	—	—	—	373
Share-based compensation	—	—	133,454	—	—	—	—	—	133,454
Net incremental tax benefit related to share-based compensation	—	—	125,451	—	—	—	—	—	125,451
Vesting of redeemable equity awards	—	—	(418 )	—	—	—	—	—	(418 )
Adjustment to the carrying value of redeemable noncontrolling interests	—	—	(4,169 )	—	—	—	—	—	(4,169 )
Balance as of January 3, 2016	186,663	1,859	2,497,501	36	1,022,765	(40,079)	(1,673,608 )	—	1,848,553
Net income (loss)	—	—	—	—	462,649	—	—	(13,817 )	448,832
Unrealized loss on available-for-sale securities, net of deferred tax	—	—	—	(1,073 )	—	—	—	—	(1,073 )
Issuance of common stock, net of repurchases	2,096	28	47,599	—	—	(2,506 )	(349,167 )	—	(301,540 )
Tax impact from the conversion of convertible notes	—	—	(8 )	—	—	—	—	—	(8 )
Share-based compensation	—	—	128,538	—	—	—	—	—	128,538
Net incremental tax benefit related to share-based compensation	—	—	86,872	—	—	—	—	—	86,872
Adjustment to the carrying value of redeemable noncontrolling interests	—	—	(21,194 )	—	—	—	—	—	(21,194 )
Vesting of redeemable equity awards	—	—	(1,942 )	—	—	—	—	—	(1,942 )

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Vesting of non-redeemable equity awards	—	—	(67)	)	—	—	—	—	67	—
Issuance of subsidiary shares in business combination	—	—	2,102	—	—	—	—	—	198	2,300
Issuance of treasury stock	—	—	3,554	—	—	—	22	346	—	3,900
Contributions from noncontrolling interest owners	—	—	—	—	—	—	—	—	80,000	80,000
Proceeds from early exercise of equity awards from a subsidiary	—	—	—	—	—	—	—	—	6,558	6,558
Tax impact of deemed dividend from GRAIL, Inc.	—	—	(9,561)	)	—	—	—	—	—	(9,561)
Balance as of January 1, 2017	188,759	\$ 1,887	\$ 2,733,394	\$ (1,037)	\$ 1,485,414	(42,563)	\$ (2,022,429)	\$ 73,006	\$ 2,270,235	

See accompanying notes to consolidated financial statements.

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ILLUMINA, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(In thousands)

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Cash flows from operating activities:			
Consolidated net income	\$428,090	\$457,390	\$ 353,351
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation expense	89,955	72,687	61,905
Amortization of intangible assets	50,960	53,732	50,669
Share-based compensation expense	129,065	132,593	152,551
Accretion of debt discount	29,732	38,517	38,069
Loss on extinguishment of debt	113	4,062	31,360
Incremental tax benefit related to share-based compensation	(91,332 )	(126,659 )	(126,479 )
Deferred income tax expense	93,562	80,504	99,846
Change in fair value of contingent consideration	(1,161 )	(6,124 )	(5,356 )
Cost-method investment gain, net	—	(15,601 )	(4,427 )
Gain on litigation settlement	(11,490 )	—	(109,363 )
Other	14,759	6,937	15,618
Changes in operating assets and liabilities:			
Accounts receivable	3,239	(95,913 )	(50,381 )
Inventory	(29,686 )	(80,545 )	(36,542 )
Prepaid expenses and other current assets	(1,204 )	(10,876 )	6,619
Other assets	(6,882 )	(1,418 )	(36,256 )
Accounts payable	(1,969 )	46,296	(2,106 )
Accrued liabilities	(24,250 )	98,791	60,332
Other long-term liabilities	15,737	5,223	1,861
Net cash provided by operating activities	687,238	659,596	501,271
Cash flows from investing activities:			
Purchases of available-for-sale securities	(894,369 )	(797,022 )	(791,252 )
Sales of available-for-sale securities	543,252	582,528	391,655
Maturities of available-for-sale securities	139,642	294,224	150,229
Net cash paid for acquisitions	(17,841 )	(36,581 )	(3,285 )
Net purchases of strategic investments	(13,842 )	(6,048 )	(11,755 )
Purchases of property and equipment	(259,891 )	(142,847 )	(105,996 )
Cash paid for intangible assets	(11,490 )	(400 )	(36,220 )
Net cash used in investing activities	(514,539 )	(106,146 )	(406,624 )
Cash flows from financing activities:			
Payments on financing obligations	(65,897 )	(244,952 )	(29,991 )
Payments on acquisition related contingent consideration liability	(29,200 )	(2,900 )	—
Proceeds from issuance of debt	5,000	—	1,132,378
Repurchase of convertible notes	—	—	(1,244,721 )
Incremental tax benefit related to share-based compensation	91,332	126,659	126,479
Common stock repurchases	(249,342 )	(274,324 )	(237,183 )
Taxes paid related to net share settlement of equity awards	(99,825 )	(127,212 )	(10,038 )
Proceeds from issuance of common stock	47,661	71,839	96,328
Proceeds from early exercise of equity awards from a subsidiary	6,558	—	—
Contributions from noncontrolling interest owners	89,000	32,128	—

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Net cash used in financing activities	(204,713 )	(418,762 )	(166,748 )
Effect of exchange rate changes on cash and cash equivalents	(2,240 )	(2,072 )	(3,382 )
Net (decrease) increase in cash and cash equivalents	(34,254 )	132,616	(75,483 )
Cash and cash equivalents at beginning of year	768,770	636,154	711,637
Cash and cash equivalents at end of year	\$734,516	\$768,770	\$ 636,154
Supplemental cash flow information:			
Cash paid for income taxes	\$59,749	\$16,913	\$ 17,886

See accompanying notes to consolidated financial statements.

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ILLUMINA, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Unless the context requires otherwise, references in this report to “Illumina,” “we,” “us,” the “Company,” and “our” refer to Illumina, Inc. and its consolidated subsidiaries.

#### 1. Organization and Summary of Significant Accounting Policies

##### Organization and Business

Illumina, Inc. is a provider of sequencing- and array-based solutions, which serves customers in a board range of markets, enabling the adoption of genomic solutions in research and clinical settings. The Company’s customers include leading genomic research centers, academic institutions, government laboratories, and hospitals, as well as pharmaceutical, biotechnology, agrigenomics, commercial molecular diagnostic laboratories, and consumer genomics companies.

##### Basis of Presentation

The consolidated financial statements of the Company have been prepared in conformity with U.S. generally accepted accounting principles and include the accounts of the Company and its wholly-owned subsidiaries, majority-owned or controlled companies, and variable interest entities (VIEs) for which the Company is the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation.

The Company evaluates its ownership, contractual and other interests in entities that are not wholly-owned by the Company to determine if these entities are VIEs, and, if so, whether the Company is the primary beneficiary of the VIE. In determining whether the Company is the primary beneficiary of a VIE and is therefore required to consolidate the VIE, the Company applies a qualitative approach that determines whether it has both (1) the power to direct the activities of the VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb losses of, or the rights to receive benefits from, the VIE that could potentially be significant to that VIE. The Company continuously assesses whether it is the primary beneficiary of a VIE as changes to existing relationships or future transactions may result in the consolidation or deconsolidation, as the case may be. The Company has not provided financial or other support during the periods presented to its VIEs that it was not previously contractually required to provide.

The equity method is used to account for investments in which the Company has the ability to exercise significant influence, but not control, over the investee. Such investments are recorded within other assets, and the share of net income or losses of equity investments is recognized on a one quarter lag in other expense, net.

##### Redeemable Noncontrolling Interests

Noncontrolling interests represent the portion of equity (net assets) in a consolidated entity that is not wholly-owned by the Company that is not attributable, directly or indirectly, to the Company. Noncontrolling interests with embedded contingent redemption features, such as put rights, that are not solely within the Company’s control are considered redeemable noncontrolling interests. Redeemable noncontrolling interests are presented outside of stockholders’ equity on the consolidated balance sheets.

##### Segment Information

The Company is organized into three operating segments for purposes of evaluating its business operations and reviewing its financial results. One segment consists of Illumina’s core operations (Core Illumina). The other two

segments relate to the activities of the Company's consolidated VIEs, GRAIL and Helix. The combined results of operations of the Company's consolidated VIEs became material during the year ended January 1, 2017. As such, the Company commenced reporting two segments, Core Illumina and Consolidated VIEs, during 2016. Financial information for all periods presented has been classified to reflect these changes to our reportable segments. For further information on the Company's segments, refer to note "12. Segment Information, Geographic Data, and Significant Customers".

Fiscal Year

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company's fiscal year is 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, September 30, and December 31. The year ended January 1, 2017 was 52 weeks; the year ended January 3, 2016 was 53 weeks; and the year ended December 28, 2014 was 52 weeks.

Reclassifications

Certain prior period amounts have been reclassified to conform to the current period presentation.

Use of Estimates

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

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606). The new standard is based on the principle that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Since its initial release, the FASB has issued several amendments to the standard, which include clarification of accounting guidance related to identification of performance obligations, intellectual property licenses, and principal vs. agent considerations.

ASU 2014-09 and all subsequent amendments (collectively, the "new standards") will be effective for the Company beginning in the first quarter of 2018 and may be applied using either the full retrospective method, in which case the standard would be applied to each prior reporting period presented, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application.

The Company formed an implementation team in 2016 to oversee adoption of the new standards. The implementation team has completed its initial assessment of the new standards, including a detailed review of the Company's contract portfolio and revenue streams, particularly around product revenues, to identify potential differences in accounting as a result of the new standards. It performed an analysis of those differences and formed preliminary conclusions on the expected changes. While the team's analysis to date suggests the impact of adoption will not have a material impact on the Company's existing revenue accounting policies or financial statements, there are a number of steps in the team's project plan that remain to be completed including: finalizing contract reviews, evaluating the impact on the company's services and other revenue streams, and working through anticipated changes to systems, business processes and controls to support the adoption of the new standards. Assuming the impact is not material, the Company expects to adopt the new standards using the modified retrospective method with an adjustment to beginning retained earnings for the cumulative effect of the change.

In February 2016, the Financial Accounting Standards Board issued Accounting Standard Update (ASU) 2016-02, Leases (Topic 842). The new standard requires lessees to recognize most leases on their balance sheets as lease liabilities with corresponding right-of-use assets and eliminates certain real estate-specific provisions. ASU 2016-02 will be effective for the Company beginning in the first quarter of 2019. ASU 2016-02 will be adopted on a modified retrospective transition basis for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The Company is currently evaluating the impact of ASU 2016-02 on its



consolidated financial statements.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In March 2016, the Financial Accounting Standards Board issued Accounting Standard Update (ASU) 2016-09, Compensation - Stock Compensation (Topic 718), which aims to simplify the accounting for share-based payment transactions, including accounting for income taxes, classification on the statement of cash flows, accounting for forfeitures, and classification of awards as either liabilities or equity. This ASU is effective for the Company beginning in the first quarter of 2017 and the Company will classify excess tax benefits from share-based payment arrangements as a discrete item within the provision for income taxes on the consolidated statement of income, rather than recognizing excess tax benefits on the consolidated statement of stockholders' equity.

In addition, under the ASU, excess income tax benefits from share-based compensation arrangements are classified as cash flow from operations, rather than cash flow from financing activities. The Company has elected to apply the cash flow classification guidance retrospectively.

If this standard had been adopted in fiscal year 2016, the provision for income taxes would have been reduced by \$86.9 million and cash flows from operating activities would have been increased by \$91.3 million. Further, the Company had \$46.4 million of unrealized excess tax benefits associated with share-based compensation as of January 1, 2017. These tax benefits will be accounted for as a credit to retained earnings when this ASU becomes effective in the first quarter of 2017.

The actual benefit realized in the future periods is inherently uncertain and will vary based on the timing and value realized for future share-based payment arrangements. Other than these reclassifications, the effect of excess tax benefits on the provision for income taxes, and the adjustment to retained earnings, the Company does not believe the adoption of this ASU will materially impact its consolidated financial statements.

In June 2016, the FASB issued Accounting Standards Update (ASU) 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments, which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables and available for sale debt securities. The ASU is effective for the Company beginning in the first quarter of 2020, with early adoption permitted. The Company is currently evaluating the impact of ASU 2016-13 on its consolidated financial statements.

#### Concentrations of Risk

The Company operates in markets that are highly competitive and rapidly changing. Significant technological changes, shifting customer needs, the emergence of competitive products or services with new capabilities, and other factors could negatively impact the Company's operating results. A portion of the Company's customers consist of university and research institutions that management believes are, to some degree, directly or indirectly supported by the United States Government. A significant change in current research funding, particularly with respect to the U.S. National Institutes of Health, could have an adverse impact on the Company's future revenues and results of operations.

The Company is also subject to risks related to its financial instruments including its cash and cash equivalents, investments, and accounts receivable. Most of the Company's cash and cash equivalents as of January 1, 2017 were deposited with U.S. financial institutions, either domestically or with their foreign branches. The Company's investment policy restricts the amount of credit exposure to any one issuer to 5% of the portfolio or 5% of the total issue size outstanding at the time of purchase and to any one industry sector, as defined by Clearwater Analytics (Industry Sector Report), to 30% of the portfolio at the time of purchase. There is no limit to the percentage of the

portfolio that may be maintained in debt securities in U.S. government-sponsored entities, U.S. Treasury securities, and money market funds.

The Company requires customized products and components that currently are available from a limited number of sources. The Company sources certain key products and components included in its products from single vendors.

The Company performs a regular review of customer activity and associated credit risks and does not require collateral or enter into netting arrangements. Shipments to customers outside the United States comprised 46%, 46%, and 49% of the Company's revenue for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively. Customers outside the United States represented 48% of the Company's gross trade accounts receivable balance as of both January 1, 2017 and January 3, 2016.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

International sales entail a variety of risks, including currency exchange fluctuations, longer payment cycles, and greater difficulty in accounts receivable collection. The Company is also subject to general geopolitical risks, such as political, social and economic instability, and changes in diplomatic and trade relations. The risks of international sales are mitigated in part by the extent to which sales are geographically distributed. The Company has historically not experienced significant credit losses from investments and accounts receivable.

#### Fair Value Measurements

The Company determines the fair value of its assets and liabilities based on 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 maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses a fair value hierarchy with three levels of inputs, of which the first two are considered observable and the last unobservable, to measure fair value:

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.

The carrying amounts of financial instruments such as cash and cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable, and accrued liabilities, excluding acquisition related contingent consideration liabilities, approximate the related fair values due to the short-term maturities of these instruments.

#### Functional Currency

The U.S. dollar is the functional currency of the Company's international operations. The Company re-measures its foreign subsidiaries' monetary assets and liabilities to the U.S. dollar and records the net gains or losses resulting from re-measurement in other expense, net in the consolidated statements of income.

#### Acquisitions

The Company measures all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at fair value as of the acquisition date. Contingent purchase considerations to be settled in cash are re-measured to estimated fair value at each reporting period with the change in fair value recorded in acquisition related gain, net, a component of operating expenses. In addition, the Company capitalizes in-process research and development (IPR&D) and either amortizes it over the life of the product upon commercialization, or impairs it if the project is abandoned. Post-acquisition adjustments in deferred tax asset valuation allowances and liabilities for uncertain tax positions are recorded in current period income tax expense.

In January 2016, the Company closed two acquisitions consisting of \$17.8 million in upfront cash payments, equity instruments, and certain contingent consideration provisions.

#### Cash Equivalents and Short-Term Investments

Cash equivalents are comprised of short-term, highly liquid investments with maturities of 90 days or less at the date of purchase.

Short-term investments consist predominantly of debt securities in U.S. government-sponsored entities, corporate debt securities, and U.S. Treasury securities. Management classifies short-term investments as available-for-sale at the time of purchase and evaluates such classification as of each balance sheet date. All short-term investments are recorded at estimated fair value. Unrealized gains and losses for available-for-sale securities are included in accumulated other comprehensive income, a component of stockholders' equity. The Company evaluates its investments to assess whether those with unrealized loss positions are other than temporarily impaired. Impairments are considered to be other than temporary if they are related to deterioration in credit risk or if it is likely that the Company will sell the securities before the recovery of their cost basis.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Realized gains, losses, and declines in value judged to be other than temporary are determined based on the specific identification method and are reported in interest income in the consolidated statements of income.

## Accounts Receivable

Trade accounts receivable are recorded at the net invoice value and are not interest bearing. The Company considers receivables past due based on the contractual payment terms. The Company reserves specific receivables if collectibility is no longer reasonably assured. The Company also reserves a percentage of its trade receivable balance based on collection history and current economic trends that might impact the level of future credit losses. The Company re-evaluates such reserves on a regular basis and adjusts its reserves as needed. Once a receivable is deemed to be uncollectible, such balance is charged against the reserve.

## Inventory

Inventory is stated at the lower of cost or market, on a first in, first out basis. 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 estimated based on product life cycles, quality issues, historical experience, and usage forecasts.

## Property and Equipment

Property and equipment are stated at cost, subject to review for impairment, and depreciated over the estimated useful lives of the assets, using the straight-line method. Amortization of leasehold improvements is recorded over the shorter of the lease term or the estimated useful life of the related assets. Amortization of assets that are recorded under capital leases are included in depreciation expense. Maintenance and repairs are charged to operations as incurred. When assets are sold, or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any gain or loss is included in operating expense.

The estimated useful lives of the major classes of property and equipment are generally as follows:

	Estimated Useful Lives
Building and leasehold improvements	4 to 30 years
Machinery and equipment	3 to 5 years
Computer hardware and software	3 to 7 years
Furniture and fixtures	7 years

In 2015, as a part of the Company's ongoing effort to upgrade its information systems, the Company implemented a new enterprise resource planning software and applications to manage parts of its business operations. Certain costs incurred in the development of such internal-use software and software applications, including external direct costs of materials and services and applicable compensation costs of employees devoted to specific software development were capitalized as computer software costs. Costs incurred outside of the application development stage were expensed as incurred.

## Leases

Leases are reviewed and classified as capital or operating at their inception. Additionally, the Company evaluates whether it is the accounting owner during the construction period when the Company is involved in the construction of leased assets. For operating leases, the Company records rent expense on a straight-line basis over the term of the

lease, which includes the construction build-out period and lease extension periods, if appropriate. The difference between rent payments and straight-line rent expense is recorded as deferred rent in accrued liabilities and other long-term liabilities. Lease incentives are amortized on a straight-line basis over the lease term as a reduction to rent expense. The Company capitalizes leasehold improvements and amortizes the value over the shorter of the lease term or expected useful lives.

Headquarter relocation expenses consisted of expenses such as accelerated depreciation expense, impairment of assets, additional rent expense during the transition period in 2012 when both the new and former headquarter facilities were occupied, moving expenses, cease-use losses, and accretion of interest expense on lease exit liability. The Company completed the

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

relocation of its headquarters in 2012 to another facility in San Diego, California and recorded cease-use losses and the corresponding facility exit obligation upon vacating its former headquarters in 2011 and 2012, calculated as the present value of the remaining lease obligation offset by estimated sublease rental receipts during the remaining lease period, adjusted for deferred items and estimated lease incentives. The Company reassesses the facility exit obligation on a quarterly basis and the key assumptions used in the calculation include the amount and timing of estimated sublease rental receipts, and the risk-adjusted discount rate.

## Goodwill, Intangible Assets and Other Long-Lived Assets

Goodwill, which has an indefinite useful life, represents the excess of cost over fair value of net assets acquired. The change in the carrying value of goodwill during the year ended January 1, 2017, was due to current year acquisitions. Goodwill is reviewed for impairment at least annually during the second quarter, or more frequently if an event occurs indicating the potential for impairment. During its goodwill impairment review, the Company may assess qualitative factors to determine whether it is more likely than not that the fair value of its reporting unit is less than its carrying amount, including goodwill. The qualitative factors include, but are not limited to, macroeconomic conditions, industry and market considerations, and the overall financial performance of the Company. If, after assessing the totality of these qualitative factors, the Company determines that it is not more likely than not that the fair value of its reporting unit is less than its carrying amount, then no additional assessment is deemed necessary. Otherwise, the Company proceeds to perform the two-step test for goodwill impairment. The first step involves comparing the estimated fair value of the reporting unit with its carrying value, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, the Company performs the second step of the goodwill impairment test to determine the amount of loss, which involves comparing the implied fair value of the goodwill to the carrying value of the goodwill. The Company may also elect to bypass the qualitative assessment in a period and elect to proceed to perform the first step of the goodwill impairment test. The Company performed its annual assessment for goodwill impairment in the second quarter of 2016, noting no impairment.

The Company's identifiable intangible assets are typically comprised of acquired core technologies, licensed technologies, customer relationships, license agreements, and trade names. The cost of identifiable intangible assets with finite lives is generally amortized on a straight-line basis over the assets' respective estimated useful lives.

The Company regularly performs reviews to determine if any event has occurred that may indicate its intangible assets with finite useful lives and other long-lived assets are potentially impaired. If indicators of impairment exist, the Company performs an impairment test to assess the recoverability of the affected assets by determining whether the carrying amount of such assets exceeds the undiscounted expected future cash flows. If the affected assets are not recoverable, the Company estimates the fair value of the assets and records an impairment loss if the carrying value of the assets exceeds the fair value. Factors that may indicate potential impairment 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 the Company's strategic business objectives, and the pattern of utilization of a particular asset.

## Derivatives

The Company is exposed to foreign exchange rate risks in the normal course of business. The Company enters into foreign exchange contracts to manage foreign currency risks related to monetary assets and liabilities that are denominated in currencies other than the U.S. dollar. These foreign exchange contracts are carried at fair value in other assets or other liabilities and are not designated as hedging instruments. Changes in the value of the derivatives are recognized in other expense, net, along with the re-measurement gain or loss on the foreign currency denominated



assets or liabilities.

As of January 1, 2017, the Company had foreign exchange forward contracts in place to hedge exposures in the euro, Japanese yen, and Australian dollar. As of January 1, 2017 and January 3, 2016, the total notional amount of outstanding forward contracts in place for foreign currency purchases was \$68.8 million and \$61.3 million, respectively.

#### Warranties

The Company generally provides a one-year warranty on instruments. Additionally, the Company provides a warranty on consumables through the expiration date, which generally ranges from six to twelve months after the manufacture date. At the time revenue is recognized, the Company establishes an accrual for estimated warranty expenses based on historical experience as well as anticipated product performance. The Company periodically reviews its warranty reserve for adequacy and adjusts

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

the warranty accrual, if necessary, based on actual experience and estimated costs to be incurred. Warranty expense is recorded as a component of cost of product revenue.

Revenue Recognition

The Company's revenue is generated primarily from the sale of products and services. Product revenue primarily consists of sales of instruments and consumables used in genetic analysis. Service and other revenue primarily consists of revenue generated from genotyping and sequencing services and instrument service contracts.

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. The Company occasionally offers discounts on newly introduced products to recent customers of existing products. These promotions sometimes involve the trade-in of existing products in exchange for a discount on new products. Where applicable, the Company defers a portion of revenue on the sales of existing products in recognition of the promotional discounts until the delivery of new products. All revenue is recorded net of discounts and sales taxes collected on behalf of governmental authorities.

Revenue from product sales is recognized generally upon transfer of title to the customer, provided that no significant obligations remain and collection of the receivable is reasonably assured. Revenue from instrument service contracts is recognized as the services are rendered, typically evenly over the contract term. Revenue from genotyping and sequencing services is recognized when earned, which is generally at the time the genotyping or sequencing analysis data is made available to the customer or agreed upon milestones are reached.

In order to assess whether the price is fixed or determinable, the Company evaluates whether an arrangement is cancellable or subject to future changes in price, deliverables, or other terms. If it is determined that the price is not fixed or determinable, the Company defers revenue recognition until the price becomes fixed or determinable. The Company assesses collectibility based on a number of factors, including past transaction history with, and the creditworthiness of, the customer. If the Company determines that collection of a payment is not reasonably assured, revenue recognition is deferred until receipt of payment.

The Company regularly enters into contracts where revenue is derived from multiple deliverables including products or services. These products or services are generally delivered within a short time frame, approximately three to six months, after the contract execution date. Revenue recognition for contracts with multiple deliverables is based on the individual units of accounting determined to exist in the contract. A delivered item is considered a separate unit of accounting when the delivered item has value to the customer on a stand-alone basis. 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.

For transactions with multiple deliverables, consideration is allocated at the inception of the contract to all deliverables based on their relative selling price. The relative selling price for each deliverable is determined using vendor specific objective evidence (VSOE) of selling price or third-party evidence of selling price if VSOE does not exist. If neither VSOE nor third-party evidence exists, the Company uses its best estimate of the selling price for the deliverable.

In order to establish VSOE of selling price, the Company must regularly sell the product or service on a standalone basis with a substantial majority priced within a relatively narrow range. VSOE of selling price is usually the midpoint

of that range. If there are not a sufficient number of standalone sales and VSOE of selling price cannot be determined, then the Company considers whether third party evidence can be used to establish selling price. Due to the lack of similar products and services sold by other companies within the industry, the Company has rarely established selling price using third-party evidence. If neither VSOE nor third party evidence of selling price exists, the Company determines its best estimate of selling price using average selling prices over a rolling 12-month period coupled with an assessment of current market conditions. If the product or service has no history of sales or if the sales volume is not sufficient, the Company relies upon prices set by the Company's pricing committee adjusted for applicable discounts. The Company recognizes revenue for delivered elements only when it determines there are no uncertainties regarding customer acceptance.

In certain markets, the Company sells products and provides services to customers through distributors that specialize in life science products. In most sales through distributors, the product is delivered directly to customers. In cases where the product is delivered to a distributor, revenue recognition is deferred until acceptance is received from the distributor, and/or the

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

end-user, if required by the applicable sales contract. The terms of sales transactions through distributors are consistent with the terms of direct sales to customers. These transactions are accounted for in accordance with the Company's revenue recognition policy described herein.

#### Share-Based Compensation

The Company incurs share-based compensation expense related to restricted stock, its Employee Stock Purchase Plan (ESPP), and stock options.

Restricted stock units (RSU), restricted stock awards (RSA), and performance stock units (PSU) are all considered restricted stock. The fair value of restricted stock is determined by the closing market price of the Company's common stock on the date of grant. The Company recognizes share-based compensation expense based on the fair value on a straight-line basis over the requisite service periods of the awards, taking into consideration estimated forfeitures. PSU represents a right to receive a certain number of shares of common stock based on the achievement of corporate performance goals and continued employment during the vesting period. At each reporting period, the Company reassesses the probability of the achievement of such corporate performance goals and any additional expenses resulting from an adjustment in the estimated shares to be released are treated as a cumulative catch-up in the period of adjustment.

The Company uses the Black-Scholes-Merton option-pricing model to estimate the fair value of stock purchases under ESPP and stock options granted. The model assumptions include expected volatility, term, dividends, and the risk-free interest rate. The Company determines the expected volatility by equally weighing the historical and implied volatility of the Company's common stock. The historical volatility is generally commensurate with the estimated expected term of the Company's stock awards, adjusted for the impact of unusual fluctuations 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 term of an award is based on historical forfeiture experience, exercise activity, and on the terms and conditions of the stock awards. The expected dividend yield is determined to be 0% given that the Company has never declared or paid cash dividends on its common stock and does not anticipate paying such cash dividends. The risk-free interest rate is based upon U.S. Treasury securities with remaining terms similar to the expected term of the share-based awards.

#### Shipping and Handling Expenses

Shipping and handling expenses are included in cost of product revenue.

#### Research and Development

Research and development expenses include personnel expenses, contractor fees, license fees, facilities costs, and utilities. Expenditures relating to research and development are expensed in the period incurred.

#### Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were \$19.5 million, \$18.5 million, and \$16.4 million for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively.

#### 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. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the provision for income taxes in the period that includes the enactment date.

Deferred tax assets are regularly assessed to determine the likelihood they will be recovered from future taxable income. A valuation allowance is established when the Company believes it is more likely than not the future realization of all or some of a deferred tax asset will not be achieved. In evaluating the ability to recover deferred tax assets within the jurisdiction which they arise the Company considers all available positive and negative evidence. Factors reviewed include the cumulative pre-tax book income for the past three years, scheduled reversals of deferred tax liabilities, history of earnings and reliable forecasting,

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

projections of pre-tax book income over the foreseeable future, and the impact of any feasible and prudent tax planning strategies.

The Company recognizes 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, the Company follows 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 the Company.

The Company recognizes the impact of a tax position in the 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.

## Earnings per Share

Basic earnings per share attributable to Illumina stockholders is computed based on the weighted average number of common shares outstanding during the period. Diluted earnings per share attributable to Illumina stockholders is computed based on the sum of the weighted average number of common shares and potentially dilutive common shares outstanding during the period. Per-share earnings of our VIEs are included in the Company's consolidated basic and diluted earnings per share computations based on the Company's share of the VIE's securities.

Potentially dilutive common shares consist of shares issuable under convertible senior notes, equity awards, and warrants. Convertible senior notes have a dilutive impact when the average market price of the Company's common stock exceeds the applicable conversion price of the respective notes. Potentially dilutive common shares from equity awards and warrants are determined using the average share price for each period under the treasury stock method. In addition, the following amounts are assumed to be used to repurchase shares: proceeds from exercise of equity awards and warrants; the average amount of unrecognized compensation expense for equity awards; and estimated tax benefits that will be recorded in additional paid-in capital when expenses related to equity awards become deductible. In loss periods, basic net loss per share and diluted net loss per share are identical because the otherwise dilutive potential common shares become anti-dilutive and are therefore excluded.

The following table presents the calculation of weighted average shares used to calculate basic and diluted earnings per share (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Weighted average shares outstanding	146,788	144,826	135,553
Effect of potentially dilutive common shares from:			
Convertible senior notes	60	1,661	3,489
Equity awards	1,192	2,582	4,340
Warrants	—	—	5,595
Weighted average shares used in calculating diluted earnings per share	148,040	149,069	148,977
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	459	139	124

## Accumulated Other Comprehensive (Loss) Income

Comprehensive income is comprised of net income and other comprehensive income. Accumulated other comprehensive (loss) income on the consolidated balance sheets at January 1, 2017 and January 3, 2016 includes accumulated foreign currency translation adjustments and unrealized gains and losses on the Company's available-for-sale securities.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

	January 1, 2017	January 3, 2016
Foreign currency translation adjustments	\$ 1,289	\$ 1,289
Unrealized (loss) gain on available-for-sale securities, net of deferred tax	(2,326 )	(1,253 )
Total accumulated other comprehensive (loss) income	\$(1,037 )	\$ 36

## 2. Balance Sheet Account Details

## Short-Term Investments

The following is a summary of short-term investments (in thousands):

	January 1, 2017				January 3, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-sale securities:								
Debt securities in government-sponsored entities	\$33,862	\$ —	\$(162 )	\$33,700	\$14,634	\$ —	\$(8 )	\$14,626
Corporate debt securities	478,159	42	(1,959 )	476,242	422,177	44	(1,127 )	421,094
U.S. Treasury securities	315,502	31	(1,267 )	314,266	182,144	3	(417 )	181,730
Total available-for-sale securities	\$827,523	\$ 73	\$(3,388 )	\$824,208	\$618,955	\$ 47	\$(1,552 )	\$617,450

Contractual maturities of available-for-sale debt securities as of January 1, 2017 are as follows (in thousands):

	Estimated Fair Value
Due within one year	\$362,143
After one but within five years	462,065
Total	\$824,208

The Company has the ability, if necessary, to liquidate any of its cash equivalents and short-term investments in order to meet its liquidity needs in the next 12 months. Accordingly, those investments with contractual maturities greater than one year from the date of purchase nonetheless are classified as short-term on the accompanying Consolidated Balance Sheets.

## Strategic Investments

As of January 1, 2017 and January 3, 2016, the aggregate carrying amounts of the Company's cost-method investments in non-publicly traded companies were \$57.4 million and \$56.6 million, respectively, included in other assets. Revenue recognized from transactions with such companies were \$55.7 million, \$61.0 million, and \$39.8 million for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively.

The Company's cost-method investments are assessed for impairment quarterly. The Company determines that it is not practicable to estimate the fair value of its cost-method investments on a regular basis and does not reassess the



fair value of cost-method investments if there are no identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investments. No material impairment losses were recorded during the years ended January 1, 2017, January 3, 2016, and December 28, 2014.

During the year ended January 3, 2016, the Company recognized gains on dispositions of cost-method investments of \$18.1 million. During the year ended December 28, 2014, the Company recorded a gain of \$4.4 million associated with additional proceeds received for a cost-method investment sold in a prior period.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

On April 14, 2016, the Company announced that it has committed to invest \$100.0 million in the Fund. The capital commitment is callable over ten years, and up to \$40.0 million can be drawn down during the first year. The Company's investment in the Fund is accounted for as an equity method investment, and had a balance of \$9.7 million as of January 1, 2017. During the year ended January 1, 2017, the Company transferred \$3.2 million of its cost-method investments to the Fund and contributed \$7.4 million in cash.

## Accounts Receivable

Accounts receivable, net consist of the following (in thousands):

	January 1, 2017	January 3, 2016
Accounts receivable from product and service sales	\$385,164	\$393,106
Other receivables	386	636
Total accounts receivable, gross	385,550	393,742
Allowance for doubtful accounts	(4,234 )	(8,213 )
Total accounts receivable, net	\$381,316	\$385,529

## Inventory

Inventory consists of the following (in thousands):

	January 1, 2017	January 3, 2016
Raw materials	\$101,999	\$97,740
Work in process	161,087	138,322
Finished goods	37,084	34,715
Total inventory	\$300,170	\$270,777

## Property and Equipment

Property and equipment, net consists of the following (in thousands):

	January 1, 2017	January 3, 2016
Leasehold improvements	\$270,453	\$178,019
Machinery and equipment	274,376	224,158
Computer hardware and software	155,602	136,550
Furniture and fixtures	24,023	18,539
Building	9,015	7,670
Construction in progress	306,678	44,501
Total property and equipment, gross	1,040,147	609,437
Accumulated depreciation	(326,813 )	(266,743 )
Total property and equipment, net	\$713,334	\$342,694

Property and equipment, net included accrued expenditures of \$219.5 million, \$23.7 million and \$14.1 million for the years ended January 1, 2017, January 3, 2016 and December 28, 2014, respectively, which were excluded from the consolidated statements of cash flows. For the years ended January 1, 2017 and January 3, 2016, accrued expenditures includes \$193.4 million and \$9.5 million, respectively, in construction in progress recorded under build-to-suit lease accounting.

During the years ended January 1, 2017 and January 3, 2016, \$6.1 million and \$38.6 million, respectively, of computer software costs were capitalized associated with the Company's implementation of a new enterprise resource planning software and applications.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## Goodwill

Changes to the Company's goodwill balance from December 28, 2014 through January 1, 2017 are as follows (in thousands):

	Goodwill
Balance as of December 28, 2014	\$724,904
Current period acquisitions	27,725
Balance as of January 3, 2016	752,629
Current period acquisitions	23,366
Balance as of January 1, 2017	\$775,995

## Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	January 1, 2017	January 3, 2016
Deferred revenue, current portion	\$ 120,621	\$ 96,654
Accrued compensation expenses	111,800	120,662
Accrued taxes payable	32,040	44,159
Customer deposits	20,528	20,901
Acquisition related contingent liability	2,768	35,000
Other	54,994	69,468
Total accrued liabilities	\$ 342,751	\$ 386,844

## Build-to-Suit Lease Liability

The Company evaluates whether it is the accounting owner during the construction period when the Company is involved in the construction of leased assets. As a result, the Company is considered the owner of three construction projects for accounting purposes only under build-to-suit lease accounting due to certain indemnification obligations related to the construction. As of January 1, 2017 and January 3, 2016, the Company has recorded \$222.7 million and \$9.5 million, respectively, in project construction costs paid or reimbursed by the landlord as construction in progress and a corresponding build-to-suit lease liability. Once the landlord completes the construction projects, the Company will evaluate the lease in order to determine whether or not it meets the criteria for "sale-leaseback" treatment.

## Investments in Consolidated Variable Interest Entities

## GRAIL, Inc.

In January 2016, the Company obtained a majority equity ownership interest in GRAIL, Inc. (GRAIL), a company formed with unrelated third party investors to develop a blood test for early-stage cancer detection. The Company determined that GRAIL is a variable interest entity as the entity lacks sufficient equity to finance its activities without additional support. Additionally, the Company determined that it has (a) control of the entity's Board of Directors, which has unilateral power over the activities that most significantly impact the economic performance of GRAIL and (b) the obligation to absorb losses of and the right to receive benefits from GRAIL that are potentially significant to GRAIL. As a result, the Company is deemed to be the primary beneficiary of GRAIL and is required to consolidate GRAIL. On a fully diluted basis, the Company holds a 52% equity ownership interest in GRAIL as of January 1, 2017.

In January 2016, GRAIL completed its Series A convertible preferred stock financing, raising \$120.0 million, of which the Company invested \$40.0 million. Additionally, the Company and GRAIL executed a long-term supply agreement in which the Company contributed certain perpetual licenses, employees, and discounted supply terms in exchange for 112.5 million shares of GRAIL's Class B Common Stock. Such contributions are recorded at their historical basis as they remain within the

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

control of the Company. The \$80.0 million received by GRAIL from unrelated third party investors upon issuance of its Series A convertible preferred stock is classified as noncontrolling interests in stockholders' equity on the Company's consolidated balance sheet.

In June 2016, GRAIL authorized for issuance 97.5 million shares of Series A-1 convertible preferred stock, all of which were issued to Illumina in exchange for 97.5 million shares of Illumina's Class B Common Stock. As a result of the exchange, Illumina recorded a \$9.5 million deemed dividend net of tax of \$9.6 million through equity, which was eliminated in consolidation.

Prior to the exchange, the Company absorbed 90% of GRAIL's losses based upon its proportional ownership of GRAIL's common stock. Thereafter, the Company absorbed approximately 50% of GRAIL's losses based upon its proportional ownership of GRAIL's common stock.

In accordance with GRAIL's Equity Incentive Plan, the Company may be required to redeem certain vested stock awards in cash at the then approximate fair market value. The fair value of the redeemable noncontrolling interests is considered a Level 3 instrument. Such redemption right is exercisable at the option of the holder of the awards after February 28, 2021, provided that an initial public offering of GRAIL has not been completed. As the redemption provision is outside of the control of the Company, the redeemable noncontrolling interests in GRAIL are classified outside of stockholders' equity on the accompanying consolidated balance sheets. The balance of the redeemable noncontrolling interests is reported at the greater of its carrying value after receiving its allocation of GRAIL's profits and losses or its estimated redemption value at each reporting date.

The assets and liabilities of GRAIL, other than cash and cash equivalents are not significant to the Company's financial position as of January 1, 2017. Additionally, GRAIL has an immaterial impact on the Company's consolidated statements of income and cash flows for the year ended January 1, 2017.

#### Helix Holdings I, LLC

In July 2015, the Company obtained a 50% voting equity ownership interest in Helix Holdings I, LLC (Helix), a limited liability company formed with unrelated third party investors to pursue the development and commercialization of a marketplace for consumer genomics. The Company determined that Helix is a variable interest entity as the holders of the at-risk equity investments as a group lack the power to direct the activities of Helix that most significantly impact Helix's economic performance. Additionally, the Company determined that it has (a) unilateral power over one of the activities that most significantly impacts the economic performance of Helix through its contractual arrangements and no one individual party has unilateral power over the remaining significant activities of Helix and (b) the obligation to absorb losses of and the right to receive benefits from Helix that are potentially significant to Helix. As a result, the Company is deemed to be the primary beneficiary of Helix and is required to consolidate Helix.

As contractually committed, the Company contributed certain perpetual licenses, instruments, intangibles, initial laboratory setup, and discounted supply terms in exchange for voting equity interests in Helix. Such contributions are recorded at their historical basis as they remain within the control of the Company. Helix is financed through cash contributions made by the third party investors in exchange for voting equity interests in Helix.

Certain noncontrolling Helix investors may require the Company to redeem all noncontrolling interests in cash at the then approximate fair market value. The fair value of the redeemable noncontrolling interests is considered a Level 3 instrument. Such redemption right is exercisable at the option of certain noncontrolling interest holders after January

1, 2021, provided that a bona fide pursuit of the sale of Helix has occurred and an initial public offering of Helix has not been completed.

As the contingent redemption is outside of the control of Illumina, the redeemable noncontrolling interests in Helix are classified outside of stockholders' equity on the accompanying consolidated balance sheets. The balance of the redeemable noncontrolling interests is reported at the greater of its carrying value after receiving its allocation of Helix's profits and losses or its estimated redemption value at each reporting date. As of January 1, 2017, the noncontrolling shareholders and Illumina each held 50% of Helix's outstanding voting equity interests.

The assets and liabilities of Helix are not significant to the Company's financial position as of January 1, 2017. Helix has an immaterial impact on the Company's consolidated statements of income and cash flows for the fiscal year ended January 1, 2017.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of January 1, 2017, the accompanying consolidated balance sheet includes \$75.9 million of cash and cash equivalents attributable to GRAIL and Helix that will be used to settle their respective obligations and will not be available to settle obligations of the Company.

## Redeemable Noncontrolling Interests

The activity of the redeemable noncontrolling interests from December 28, 2014 through January 1, 2017 is as follows (in thousands):

	Redeemable Noncontrolling Interests
Balance as of December 28, 2014	\$ —
Cash contributions	56,875
Amount held in escrow by third party	(24,747 )
Vesting of redeemable equity awards	418
Net loss attributable to noncontrolling interests	(4,169 )
Adjustment up to the redemption value	4,169
Balance as of January 3, 2016	32,546
Cash contributions	9,000
Vesting of redeemable equity awards	1,942
Net loss attributable to noncontrolling interests	(20,742 )
Adjustment up to the redemption value	21,194
Balance as of January 1, 2017	\$ 43,940

## 3. Intangible Assets

The Company's intangible assets, excluding goodwill, include acquired licensed and core technologies, customer relationships, license agreements, and trade name. Amortization for the intangible assets that have finite useful lives is generally recorded on a straight-line basis over their useful lives.

The following is a summary of the Company's finite-lived identifiable intangible assets (in thousands):

	January 1, 2017			January 3, 2016		
	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net	Gross Carrying Amount	Accumulated Amortization	Intangibles, Net
Licensed technologies	\$95,021	\$(63,717 )	\$ 31,304	\$83,956	\$(53,226 )	\$ 30,730
Core technologies	328,098	(141,961 )	186,137	324,898	(109,706 )	215,192
Customer relationships	33,216	(22,103 )	11,113	34,246	(17,558 )	16,688
License agreements	13,688	(6,271 )	7,417	15,442	(6,289 )	9,153
Trade name	4,779	(3,398 )	1,381	5,379	(3,521 )	1,858
Total finite-lived intangible assets, net	\$474,802	\$(237,450 )	\$ 237,352	\$463,921	\$(190,300 )	\$ 273,621

As of January 1, 2017, the remaining weighted-average amortization period for finite-lived identifiable intangible assets was 6.9 years.



Intangible assets acquired during the year ended January 1, 2017 include licensed technologies, core technologies and an indefinite-lived intangible of \$11.5 million, \$3.2 million, and \$5.3 million, respectively. The weighted-average useful life of the licensed technologies and core technologies is 7.0 years and 5.0 years, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The estimated annual amortization of finite-lived intangible assets for the next five years and thereafter is shown in the following table (in thousands). Actual amortization expense to be reported in future periods could differ from these estimates as a result of acquisitions, divestitures, asset impairments, among other factors.

	Estimated Annual Amortization
2017	\$ 47,360
2018	37,967
2019	34,532
2020	26,795
2021	22,768
Thereafter	67,930
Total	\$ 237,352

## 4. Fair Value Measurements

The following table presents the Company's fair value hierarchy for assets and liabilities measured at fair value on a recurring basis as of January 1, 2017 and January 3, 2016 (in thousands):

	January 1, 2017				January 3, 2016			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Money market funds (cash equivalent)	\$385,455	\$—	\$—	\$385,455	\$391,246	\$—	\$—	\$391,246
Debt securities in government-sponsored entities	—	33,700	—	33,700	—	14,626	—	14,626
Corporate debt securities	—	476,242	—	476,242	—	421,094	—	421,094
U.S. Treasury securities	314,266	—	—	314,266	181,730	—	—	181,730
Deferred compensation plan assets	—	30,859	—	30,859	—	26,245	—	26,245
Total assets measured at fair value	\$699,721	\$540,801	\$—	\$1,240,522	\$572,976	\$461,965	\$—	\$1,034,941
Liabilities:								
Acquisition related contingent consideration liabilities	\$—	\$—	\$4,139	\$4,139	\$—	\$—	\$35,000	\$35,000
Deferred compensation liability	—	29,223	—	29,223	—	24,925	—	24,925
Total liabilities measured at fair value	\$—	\$29,223	\$4,139	\$33,362	\$—	\$24,925	\$35,000	\$59,925

The Company holds available-for-sale securities that consist of highly liquid, investment grade debt securities. The Company considers information provided by the Company's investment accounting and reporting service provider in the measurement of fair value of its debt securities. The investment service provider provides valuation information from an industry-recognized valuation service. Such valuations may be based on trade prices in active markets for identical assets or liabilities (Level 1 inputs) or valuation models using inputs that are observable either directly or indirectly (Level 2 inputs), such as quoted prices for similar assets or liabilities, yield curve, volatility factors, credit spreads, default rates, loss severity, current market and contractual prices for the underlying instruments or debt, broker and dealer quotes, as well as other relevant economic measures. The Company's deferred compensation plan

assets consist primarily of investments in life insurance contracts carried at cash surrender value, which reflects the net asset value of the underlying publicly traded mutual funds. The Company performs control procedures to corroborate the fair value of its holdings, including comparing valuations obtained from its investment service provider to valuations reported by the Company's asset custodians, validation of pricing sources and models, and review of key model inputs if necessary.

As a result of an acquisition completed in January 2016, the Company recorded \$5.3 million in contingent consideration liabilities, the majority of which was payable within 12 months after the acquisition date. The Company reassesses the fair value of any contingent consideration liabilities on a quarterly basis using the income approach. Assumptions used to estimate the acquisition date fair value of the contingent consideration include discount rates ranging from 4% to 6% and the probability

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of achieving certain milestones. This fair value measurement of the contingent consideration is based on significant inputs not observed in the market and thus represents a Level 3 measurement. Level 3 instruments are valued based on unobservable inputs that are supported by little or no market activity and reflect the Company's own assumptions in measuring fair value. Significant assumptions used in the measurement include probabilities of achieving the remaining milestones and the discount rates, which depend on the milestone risk profiles. The changes in fair value of the contingent considerations during the years ended January 1, 2017, January 3, 2016, and December 28, 2014 were due to changes in the estimated payments and discounting periods.

Changes in estimated fair value of contingent consideration liabilities from December 29, 2013 through January 1, 2017 are as follows (in thousands):

	Contingent Consideration Liability (Level 3 Measurement)
Balance as of December 29, 2013	\$ 49,480
Change in estimated fair value, recorded in acquisition related gain, net	(5,356 )
Balance as of December 28, 2014	44,124
Change in estimated fair value, recorded in acquisition related gain, net	(6,124 )
Cash payments	(3,000 )
Balance as of January 3, 2016	35,000
Additional liability recorded as a result of a current period acquisition	5,300
Change in estimated fair value, recorded in selling, general and administrative expenses	(1,161 )
Cash payments	(35,000 )
Balance as of January 1, 2017	\$ 4,139

## 5. Debt

## Convertible Senior Notes

As of January 1, 2017, the Company had outstanding \$632.5 million in principal amount of 0% convertible senior notes due June 15, 2019, and \$517.5 million in principal amount of 0.5% convertible senior notes due June 15, 2021.

## 0% Convertible Senior Notes due 2019 and 0.5% Convertible Senior Notes due 2021

In June 2014, the Company issued \$632.5 million aggregate principal amount of 0% convertible senior notes due 2019 (2019 Notes) and \$517.5 million aggregate principal amount of 0.5% convertible senior notes due 2021 (2021 Notes) in an offering conducted in accordance with Rule 144A under the Securities Act of 1933, as amended. The Notes were issued at 100% of par value. The net proceeds from the issuance, after deducting the offering expenses payable by the Company, was \$1,132.4 million. The Company used the net proceeds plus cash on hand to repurchase a portion of the outstanding 2016 Notes in privately negotiated transactions concurrently with the issuance of the 2019 and 2021 Notes.

Both the 2019 and 2021 Notes will be convertible into cash, shares of common stock, or a combination of cash and shares of common stock, at the Company's election, based on an initial conversion rate, subject to adjustment, of 3.9318 shares per \$1,000 principal amount of the notes (which represents an initial conversion price of approximately \$254.34 per share), only in the following circumstances and to the following extent: (1) during the five business-day

period after any 10 consecutive trading day period (the measurement period) in which the trading price per 2019 and 2021 Note for each day of such measurement period was less than 98% 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 (and only during that quarter) after the calendar quarter ending September 30, 2014, if the last reported sale price of the Company's common stock for 20 or more trading days in the 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 described in the indenture for the 2019 and 2021 Notes; and (4) at any time on or

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

after March 15, 2019 for the 2019 Notes, or March 15, 2021 for the 2021 Notes, through the second scheduled trading day immediately preceding the maturity date.

As noted in the indentures for the 2019 and 2021 Notes, it is the Company's intent and policy to settle conversions through combination settlement, which essentially involves repayment of an amount of cash equal to the “principal portion” and delivery of the “share amount” in excess of the conversion value over the principal portion in shares of common stock. In general, for each \$1,000 in principal the “principal portion” of cash upon settlement is defined as the lesser of \$1,000 and the conversion value during the 20-day observation period. The conversion value is the sum of the daily conversion value which is the product of the effective conversion rate divided by 20 days and the daily volume weighted average price (VWAP) of the Company's common stock. The “share amount” is the cumulative “daily share amount” during the observation period, which is calculated by dividing the daily VWAP into the difference between the daily conversion value (i.e., conversion rate x daily VWAP) and \$1,000.

The 2019 Notes carry no coupon interest. The Company pays 0.5% interest per annum on the principal amount of the 2021 Notes, payable semiannually in arrears in cash on June 15 and December 15 of each year, beginning on December 15, 2014. The 2019 and 2021 Notes mature on June 15, 2019 and June 15, 2021, respectively. If a designated event, as defined in the indentures for the 2019 and 2021 Notes, such as acquisition, merger, or liquidation, occurs prior to the maturity date, subject to certain limitations, holders of the notes may require the Company to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the repurchase date.

The Company accounts separately for the liability and equity components of the 2019 and 2021 Notes in accordance with authoritative guidance for convertible debt instruments that may be settled in cash upon conversion. The guidance requires the carrying amount of the liability component to be estimated by measuring the fair value of a similar liability that does not have an associated conversion feature. Because the Company has no outstanding non-convertible public debt, the Company determined that market-traded senior, unsecured corporate bonds represent a similar liability to the convertible senior notes without the conversion option. Based on market data available for publicly traded, senior, unsecured corporate bonds issued by companies in the same industry as the Company, and with similar maturities to the 2019 and 2021 Notes, the Company estimated the implied interest rates of its 2019 and 2021 Notes to be 2.9% and 3.5%, respectively, assuming no conversion option. Assumptions used in the estimate represent what market participants would use in pricing the liability component, including market interest rates, credit standing, and yield curves, all of which are defined as Level 2 observable inputs. The estimated implied interest rates were applied to the 2019 and 2021 Notes, which resulted in a fair value of the liability component in aggregate of \$971.5 million upon issuance, calculated as the present value of implied future payments based on the \$1,150.0 million aggregate principal amount. The \$161.2 million difference between the cash proceeds of \$1,132.7 million and the estimated fair value of the liability component was recorded in additional paid-in capital as the 2019 and 2021 Notes are not considered redeemable.

As a policy election under applicable guidance related to the calculation of diluted net income per share, the Company elected the combination settlement method as its stated settlement policy and applied the treasury stock method in the calculation of the potential dilutive impact of the 2019 and 2021 Notes. Neither the 2019 nor the 2021 Notes were convertible as of January 1, 2017, and had no dilutive impact during the year ended January 1, 2017. If the 2019 and 2021 Notes were converted as of January 1, 2017, the if-converted value would not exceed the principal amount.

0.25% Convertible Senior Notes due 2016

In 2011, the Company issued \$920.0 million aggregate principal amount of 0.25% convertible senior notes due 2016 (2016 Notes) with a maturity date of March 15, 2016. The effective rate of the liability component was estimated to be 4.5%. Based upon meeting the stock trading price conversion requirement during the three months ended March 30, 2014, the 2016 Notes became convertible on April 1, 2014 through, and including, March 11, 2016. All notes were converted by March 11, 2016.

In conjunction with the issuance of the 2019 and 2021 Notes, the Company used the net proceeds from the issuance plus cash on hand to repurchase \$600.0 million in principal amount of the outstanding 2016 Notes in privately negotiated transactions. The aggregate cash used for the repurchase was \$1,244.7 million. The repurchase is accounted for as an extinguishment of debt. Extinguishment accounting requires the purchase price to be allocated to the liability and equity components of the repurchased notes based on the fair value of the liability component, and the difference between the fair value and the carrying value of the liability component to be recognized as loss on extinguishment of debt. An interest rate of

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

1.2% upon settlement, which was estimated using Level 2 inputs, was applied to measure the fair value of the liability component of the extinguished debt. This calculation resulted in \$588.8 million allocated to the debt component and \$655.9 million allocated to the equity component. The \$31.4 million difference between the \$588.8 million fair value of debt component and the carrying value of the repurchased 2016 Notes was recorded as a loss on extinguishment of debt within other expense, net, during the year ended December 28, 2014. The \$655.9 million of the repurchase price allocated to the equity component was recorded as a reduction of additional paid-in capital.

As a result of the conversions of the 2016 Notes during the year ended January 1, 2017, the Company recorded a loss on extinguishment of debt calculated as the difference between the estimated fair value of the debt and the carrying value of the notes as of the settlement date. To measure the fair value of the converted notes as of the settlement date, the applicable interest rate was estimated using Level 2 observable inputs and applied to the converted notes using the same methodology as in the issuance date valuation.

The following table summarizes information about the conversion of the 2016 Notes during the year ended January 1, 2017 (in thousands):

	2016 Notes
Cash paid for principal of notes converted	\$75,543
Conversion value over principal amount paid in shares of common stock	\$63,753
Number of shares of common stock issued upon conversion	409

The following table summarizes information about the equity and liability components of all convertible senior notes outstanding as of the period reported (dollars in thousands). The fair values of the respective notes outstanding were measured based on quoted market prices, and is a Level 2 measurement.

	January 1, 2017	January 3, 2016
Principal amount of convertible notes outstanding	\$1,150,000	\$1,225,547
Unamortized discount of liability component	(105,312 )	(134,969 )
Net carrying amount of liability component	1,044,688	1,090,578
Less: current portion	—	(74,929 )
Long-term debt	\$1,044,688	\$1,015,649
Carrying value of equity component, net of issuance costs	\$161,237	\$213,811
Fair value of outstanding notes	\$1,107,671	\$1,456,451
Weighted average remaining amortization period of discount on the liability component	3.6 years	4.6 years

## Other

As of January 1, 2017, the accompanying consolidated balance sheets include \$1.3 million and \$3.1 million in current and long-term debt, respectively, related to an outstanding line of credit held by Helix.

## 6. Commitments

## Leases

The Company leases office and manufacturing facilities under various non-cancellable lease agreements. Facility leases generally provide for periodic rent increases, and many contain escalation clauses and renewal options. Certain leases require the Company to pay property taxes and routine maintenance. The Company is headquartered in



San Diego, California and leases facilities in San Diego and the San Francisco Bay Area in California; Madison, Wisconsin; Morrisville, North Carolina; Australia; Brazil; Canada; China; France; Japan; Singapore; the Netherlands; and the United Kingdom.

The Company is deemed to be the owner of several of its leased facilities under construction due to certain indemnification obligations related to the construction. Once the landlord completes the construction of each of the buildings, the Company will evaluate the lease in order to determine whether or not it meets the criteria for “sale-leaseback” treatment.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Annual future minimum payments of the Company's leases as of January 1, 2017 were as follows (in thousands):

	Operating Leases	Sublease Income	Net Operating Leases	Build-to-suit Leases
2017	\$42,759	\$(7,042)	\$35,717	\$12,244
2018	45,214	(9,878)	35,336	28,760
2019	46,767	(10,175)	36,592	24,537
2020	46,166	(10,369)	35,797	27,928
2021	45,420	(10,338)	35,082	28,560
Thereafter	435,605	(26,360)	409,245	254,828
Total minimum lease payments	\$661,931	\$(74,162)	\$587,769	\$376,857

Rent expense was \$45.8 million, \$38.5 million, and \$33.2 million for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively.

The Company recorded facility exit obligations upon vacating its former headquarters in 2011. Changes in the facility exit obligation from December 29, 2013 through January 1, 2017 are as follows (in thousands):

	Facility Exit Obligation
Balance as of December 29, 2013	\$38,218
Adjustment to facility exit obligation	2,555
Accretion of interest expense	2,638
Cash payments	(5,711)
Balance as of December 28, 2014	37,700
Adjustment to facility exit obligation	(5,303)
Accretion of interest expense	2,294
Cash payments	(12,531)
Balance as of January 3, 2016	22,160
Adjustment to facility exit obligation	190
Accretion of interest expense	1,296
Cash payments	(4,723)
Balance as of January 1, 2017	\$18,923

## Licensing Agreements

In the normal course of its business, the Company enters, from time to time, into licensing agreements under which the Company commits to certain minimum royalty payments, some of which are subject to adjustment. Such licensing agreements may be terminated prior to the expiration of underlying intellectual property under certain circumstances. Annual future minimum royalty payments under the Company's licensing agreements as of January 1, 2017 are as follows (in thousands):

	Minimum Payments
2017	\$12,920
2018	18,055
2019	23,100

2020	23,150
Total minimum royalty payments	\$ 77,225

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## Warranties

Changes in the Company's reserve for product warranties from December 29, 2013 through January 1, 2017 are as follows (in thousands):

	Warranty Reserve
Balance as of December 29, 2013	\$10,407
Additions charged to cost of revenue	24,150
Repairs and replacements	(18,941 )
Balance as of December 28, 2014	15,616
Additions charged to cost of revenue	27,574
Repairs and replacements	(26,473 )
Balance as of January 3, 2016	16,717
Additions charged to cost of revenue	21,243
Repairs and replacements	(24,721 )
Balance as of January 1, 2017	\$13,239

## 7. Share-based Compensation Expense

Share-based compensation expense for all stock awards consists of the following (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Cost of product revenue	\$9,070	\$9,841	\$ 9,451
Cost of service and other revenue	1,584	1,609	1,204
Research and development	42,295	42,001	50,880
Selling, general and administrative	76,116	79,142	91,016
Share-based compensation expense before taxes	129,065	132,593	152,551
Related income tax benefits	(40,969 )	(38,986 )	(44,194 )
Share-based compensation expense, net of taxes	\$88,096	\$93,607	\$ 108,357

The assumptions used for the specified reporting periods and the resulting estimates of weighted-average fair value per share for stock purchased under the ESPP are as follows:

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Risk-free interest rate	0.40%	0.07%-0.33%	0.05% - 0.13%
Expected volatility	40% - 44%	29% - 38%	38% - 41%
Expected term	0.5 - 1.0 year	0.5 -1.0 year	0.5 - 1.0 year
Expected dividends	0	% 0	% 0
Weighted-average grant-date fair value per share	\$48.29	\$ 53.92	\$ 44.64

As of January 1, 2017, approximately \$299.9 million of total unrecognized compensation cost related to restricted stock and ESPP shares issued to date is expected to be recognized over a weighted-average period of approximately 2.7 years.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## 8. Stockholders' Equity

The 2015 Stock and Incentive Compensation Plan (the 2015 Stock Plan), 2005 Solexa Equity Incentive Plan (the 2005 Solexa Equity Plan), and the New Hire Stock and Incentive Plan allow for the issuance of stock options, restricted stock units and awards, and performance stock units. As of January 1, 2017, approximately 6.2 million shares remained available for future grants under the 2015 Stock Plan and the 2005 Solexa Equity Plan. There is no set number of shares reserved for issuance under the New Hire Stock and Incentive Plan.

## Restricted Stock

The Company issues restricted stock units (RSU), restricted stock awards (RSA), and performance stock units (PSU). The Company grants RSU and PSU pursuant to the 2015 Stock Plan. RSU are share awards that, upon vesting, will deliver to the holder shares of the Company's common stock. For grants to new hires prior to July 2011 and for grants to existing employees prior to December 2014, RSU generally 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. For grants to new hires subsequent to July 2011 and for grants to existing employees subsequent to December 2014, RSU generally vest over a four-year period with equal vesting on anniversaries of the grant date. The Company satisfies RSU vesting through the issuance of new shares. The Company issues PSU for which the number of shares issuable at the end of a three-year performance period can reach up to 150% of the shares approved in the award based on the Company's performance relative to specified earnings per share targets.

The Company also issues RSA that are released based on service related vesting conditions. RSA may be issued from the Company's treasury stock or granted pursuant to the Company's 2015 Stock and Incentive Plan.

A summary of the Company's restricted stock activity and related information from December 29, 2013 through January 1, 2017 is as follows (in thousands, except per share amounts):

	Restricted Stock Awards (RSA)	Restricted Stock Units (RSU)	Performance Stock Units (PSU)(1)	Weighted-Average Grant-Date Fair Value per Share		
				RSA	RSU	PSU
Outstanding at December 29, 2013	248	3,628	1,101	\$53.46	\$59.66	\$54.64
Awarded	—	780	968	—	\$172.53	\$104.52
Vested	(140 )	(1,383 )	(753 )	\$47.90	\$55.44	\$49.52
Cancelled	—	(184 )	(59 )	—	\$65.09	\$52.87
Outstanding at December 28, 2014	108	2,841	1,257	\$56.62	\$92.35	\$96.21
Awarded	—	756	194	—	\$184.10	\$183.29
Vested	(87 )	(1,138 )	(741 )	\$58.72	\$75.29	\$60.80
Cancelled	—	(253 )	(127 )	—	\$99.50	\$99.30
Outstanding at January 3, 2016	21	2,206	583	\$47.93	\$131.80	\$169.41
Awarded	22	1,245	172	\$179.00	\$132.47	\$113.56
Vested	(11 )	(928 )	(199 )	\$47.93	\$105.49	\$148.99
Cancelled	—	(230 )	(96 )	—	\$139.74	\$163.05
Outstanding at January 1, 2017	32	2,293	460	\$136.30	\$141.80	\$158.66

(1) The number of units reflect the estimated number of shares to be issued at the end of the performance period.



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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Pre-tax intrinsic values and fair value of vested restricted stock are as follows (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Pre-tax intrinsic value of outstanding restricted stock:			
RSA	\$4,138	\$4,041	\$20,321
RSU	\$293,592	\$423,391	\$534,708
PSU	\$58,838	\$111,958	\$236,606
Fair value of restricted stock vested:			
RSA	\$505	\$5,104	\$6,712
RSU	\$97,952	\$85,683	\$76,646
PSU	\$29,668	\$45,014	\$37,313

## Stock Options

Stock options granted at the time of hire primarily vest over a four period, with 25% of options vesting on the first anniversary of the grant date and the remaining options vesting monthly over the remaining vesting period. Stock options granted subsequent to hiring primarily vest monthly over a four period. Each grant of options has a maximum term of ten years, measured from the applicable grant date, subject to earlier termination if the optionee's service ceases. Vesting in all cases is subject to the individual's continued service through the vesting date. The Company satisfies option exercises through the issuance of new shares.

The Company's stock option activity under all stock option plans from December 29, 2013 through January 1, 2017 is as follows:

	Options (in thousands)	Weighted- Average Exercise Price
Outstanding at December 29, 2013	5,724	\$32.64
Exercised	(2,478)	\$29.93
Cancelled	(35)	\$31.73
Outstanding at December 28, 2014	3,211	\$34.74
Exercised	(1,529)	\$28.54
Cancelled	(83)	\$10.31
Outstanding at January 3, 2016	1,599	\$41.95
Exercised	(552)	\$29.41
Cancelled	(2)	\$46.35
Outstanding at January 1, 2017	1,045	\$48.56

At January 1, 2017, outstanding options to purchase 1.0 million shares were exercisable with a weighted-average per share exercise price of \$48.56. The weighted-average remaining life of options outstanding and exercisable is 3.0 years as of January 1, 2017.

The aggregate intrinsic value of options outstanding and options exercisable as of January 1, 2017 was \$83.1 million. Aggregate intrinsic value represents the product of the number of options outstanding multiplied by the difference between the Company's closing stock price per share on the last trading day of the fiscal period, which was \$128.04 as



of December 30, 2016, and the exercise price. Total intrinsic value of options exercised was \$70.6 million, \$256.1 million, and \$330.5 million for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively. Total fair value of options vested was \$0.5 million, \$4.3 million, and \$17.2 million for the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## Employee Stock Purchase Plan

A total of 15.5 million shares of the Company's common stock have been reserved for issuance under its 2000 Employee Stock Purchase Plan, or ESPP. The ESPP permits eligible employees to purchase common stock at a discount 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 of the offering period or purchase date, whichever is lower. The initial offering period commenced in July 2000.

Approximately 0.2 million, 0.2 million, and 0.3 million shares were issued under the ESPP during the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively. As of January 1, 2017 and January 3, 2016, there were approximately 14.3 million and 14.5 million shares available for issuance under the ESPP, respectively.

## Warrants

In connection with the offering of the Company's convertible notes due 2014, the Company sold warrants to purchase 18.3 million shares of common stock to counterparties to the convertible note hedge transactions. The warrants had an exercise price of \$31.44 per share, and the proceeds from the sale of such warrants were used by the Company to partially offset the cost of the transactions. In July 2013, the Company settled with a hedging counterparty outstanding warrants to purchase approximately 3.0 million shares of the Company's common stock for \$125.0 million in cash. The remaining warrants were exercised in full during the year ended December 28, 2014.

## Share Repurchases

On July 28, 2016, the Company's Board of Directors authorized a new share repurchase program, which supersedes all prior and available repurchase authorizations, to repurchase \$250.0 million of outstanding common stock. During the years ended January 1, 2017, January 3, 2016, and December 28, 2014, the Company repurchased approximately 1.8 million shares for \$249.3 million, 1.7 million shares for \$274.3 million, and 1.5 million shares for \$237.2 million, respectively. Authorizations to repurchase up to an additional \$100.7 million of its common stock remained as of January 1, 2017.

## 9. Legal Proceedings

The Company is involved in various lawsuits and claims arising in the ordinary course of business, including actions with respect to intellectual property, employment, and contractual matters. In connection with these matters, the Company assesses, on a regular basis, the probability and range of possible loss based on the developments in these matters. A liability is recorded in the financial statements if it is believed to be probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Because litigation is inherently unpredictable and unfavorable results could occur, assessing contingencies is highly subjective and requires judgments about future events. The Company regularly reviews outstanding legal matters to determine the adequacy of the liabilities accrued and related disclosures. The amount of ultimate loss may differ from these estimates. Each matter presents its own unique circumstances, and prior litigation does not necessarily provide a reliable basis on which to predict the outcome, or range of outcomes, in any individual proceeding. Because of the uncertainties related to the occurrence, amount, and range of loss on any pending litigation or claim, the Company is currently unable to predict their ultimate outcome, and, with respect to any pending litigation or claim where no liability has been accrued, to make a meaningful estimate of the reasonably possible loss or range of loss that could result from an unfavorable outcome. In the event that opposing litigants in outstanding litigations or claims ultimately succeed at trial and any subsequent appeals on their claims, any potential loss or charges in excess of any established accruals, individually or in the aggregate, could

have a material adverse effect on the Company's business, financial condition, results of operations, and/or cash flows in the period in which the unfavorable outcome occurs or becomes probable, and potentially in future periods.

Enzo

On July 1, 2016, the Company entered into a Settlement and License Agreement with Enzo Life Sciences, Inc. (Enzo) that settled all claims in the litigation. Pursuant to the terms of the Settlement and License Agreement, the Company paid Enzo a one-time payment of \$21.0 million for release of past damages claimed and a fully paid-up non-exclusive license to U.S. Patent No. 7,064,197. None of the parties made any admission of liability in entering into the Settlement and License Agreement. The Company allocated the \$21.0 million settlement on a relative fair value basis, resulting in \$11.5 million capitalized as an intangible asset and a corresponding gain recorded in legal contingencies for the value of the license, which will be amortized over a period of 7 years on a straight-line basis, and the remaining \$9.5 million related to past damages claimed. The fair value

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of the license and past damages was estimated using a discounted cash flow model, and is considered to be a Level 3 measurement.

## Syntrix

On November 24, 2010, Syntrix Biosystems, Inc. (Syntrix) filed suit against the Company in the United States District Court for the Western District of Washington at Tacoma (Case No. C10-5870-BHS) alleging that the Company willfully infringed U.S. Patent No. 6,951,682 by selling its BeadChip array products, and that the Company misappropriated Syntrix's trade secrets. On January 30, 2013, the Court granted the Company's motion for summary judgment on Syntrix's trade secret claims, and dismissed those claims from the case. On March 14, 2013, a jury reached a verdict in favor of Syntrix, finding that Illumina's BeadChip kits infringe the Syntrix patent. During trial, the Court dismissed Syntrix's claim that the alleged infringement was willful. On July 1, 2013, the Court entered a Final Amended Judgment for \$115.1 million, in accordance with the jury verdict, including supplemental damages and prejudgment interest. In addition, the Court awarded Syntrix an ongoing royalty of 8% for accused sales from March 15, 2013 until the patent expires on September 16, 2019. On December 3, 2013, the Company filed a Notice of Appeal to the Court of Appeals for the Federal Circuit challenging the Final Amended Judgment. On December 16, 2013, Syntrix cross appealed the Court's dismissal of its trade secret claims and denial of its willfulness claim. For the year ended December 29, 2013, the Company recorded total charges of \$132.9 million related to this matter, \$114.6 million of which was recorded within operating expenses, with the remainder recorded to cost of sales.

On November 14, 2014, the Company entered into a Settlement and License Agreement with Syntrix and its sole shareholders, John A. Zebala and Amy Zebala, that settled all claims in the litigation. Pursuant to the terms of the Settlement and License Agreement, the Company paid Syntrix a one-time payment of \$70.0 million in exchange for a release of past damages claimed and a fully paid-up exclusive license to U.S. Patent No. 6,951,682. None of the parties made any admission of liability in entering into the Settlement and License Agreement. On November 19, 2014, the Court dismissed the litigation with prejudice and vacated the judgment against the Company. The Company allocated the \$70.0 million payment on relative fair value basis, resulting in \$29.5 million capitalized as an intangible asset for the value of the exclusive license, which is amortized over a period of 4.8 years on a straight-line basis, and the remaining \$40.5 million to the release of past damages claimed. The fair value of license and past damages was estimated using a discounted cash flow model, and is considered to be a Level 3 measurement.

The settlement of the litigation resulted in a gain of \$109.4 million, of which \$27.3 million was recorded as reversal of cost of sales, reflecting a true-up of historical royalty expenses to the effective royalty rate. The remaining gain of \$82.1 million was recorded as a legal contingency gain in operating expenses.

## Sequenom

On December 2, 2014, the Company and its subsidiary Verinata Health, Inc. entered into a series of agreements with Sequenom, Inc. (Sequenom), its subsidiary Sequenom Center for Molecular Medicine LLC (Sequenom LLC), and Chinese University of Hong Kong (CUHK), and an agreement with the Trustees of Leland Stanford University (Stanford), that, together, (1) settled a patent litigation pending in the United States District Court for the Northern District of California (the District Court) between Verinata and Stanford, on the one hand, and Sequenom, Sequenom LLC, and Isis Innovation Limited (Isis), on the other hand, (2) requested remand of certain claims and counterclaims of Sequenom, Isis, Verinata, and Stanford from the appeal pending in the United States Court of Appeals for the Federal Circuit of a second patent litigation pending in District Court in order to seek to vacate an order related to those claims and dismiss them, and (3) settled an inter partes review related to a United States Patent No. 8,195,415, assigned to Stanford and licensed to Verinata.

As part of the settlement, the Company and Sequenom have entered into a Pooled Patents Agreement and related sublicense agreements whereby (1) Sequenom granted Illumina a worldwide license to patents directed to Non-Invasive Prenatal Testing (NIPT) for Laboratory Developed Testing (LDT) and In-Vitro Diagnostic (IVD) products, which license is exclusive in the LDT field, except with respect to certain patents formerly owned by Isis, in which case it is non-exclusive, and (2) Illumina (and Verinata in some cases) granted a worldwide non-exclusive license to Sequenom under Illumina-owned and in-licensed NIPT-related patents for Sequenom to continue its business related to NIPT LDT (the patents owned or in-licensed by either the Company or Sequenom that fall under the Pooled Patents Agreement are the “Pooled Patents”). The Company also assumed, by novation, amended exclusive patent licenses from CUHK to Sequenom and entered into several new exclusive in-license agreements with CUHK related to CUHK patents directed to NIPT, and granted to Sequenom non-exclusive sublicenses under the Company’s license agreements with CUHK, Stanford, and General Hospital Corporation for Sequenom to practice NIPT LDT. The Company and Sequenom also extended, amended, and restated their current supply agreement under

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

which Sequenom purchases from the Company equipment and supplies for NIPT LDT and other clinical fields, and entered into a separate agreement whereby Sequenom transferred to the Company certain clinical samples and data useful in the development of NIPT IVD.

As consideration for the foregoing settlement arrangements, the Company agreed to pay Sequenom an aggregate of \$50.0 million, as well as to pay royalties to Sequenom for sales of NIPT IVD products. The Company and Sequenom also agreed to share revenues received for exploitation of the Pooled Patents in NIPT LDT. None of the parties made any admission of liability in entering into these arrangements. The parties filed certain stipulated motions with the Federal Circuit and District Court to vacate and dismiss the associated claims and counterclaims with prejudice, which motions have been granted by the respective courts.

The Company considered whether the elements received represented identifiable benefits that were sufficiently separable from the products it sells to Sequenom, and considered whether the value of these benefits could be reasonably estimated. The Company identified the legal settlement, clinical samples, the IVD and LDT patent rights as elements. The Company used a discounted cash flow analysis to estimate the value of the patent rights, replacement cost to value the samples, and an assumed royalty rate on historical sales for the legal settlement. These fair value estimates are considered Level 3 measurements. The Company determined that the aggregate fair value of the benefits received exceeded the consideration paid and allocated the \$50.0 million payment to the various elements on a relative fair value basis. This resulted in \$48.8 million allocated to the samples and patent rights transferred to Illumina, which were expensed in research and development expenses due to lack of alternative future use. The remaining \$1.2 million was recorded as a legal contingency charge in operating expenses.

## 10. Income Taxes

The income before income taxes summarized by region is as follows (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
United States	\$120,147	\$217,674	\$176,974
Foreign	441,031	365,468	271,784
Total income before income taxes	\$561,178	\$583,142	\$448,758

The provision for income taxes consists of the following (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Current:			
Federal	\$71,474	\$106,062	\$60,984
State	9,980	18,240	12,381
Foreign	44,942	46,397	41,815
Total current provision	126,396	170,699	115,180
Deferred:			
Federal	15,935	(11,534)	(3,191)
State	(5,254)	(31,779)	(4,974)
Foreign	(3,989)	(1,634)	(11,608)
Total deferred expense (benefit)	6,692	(44,947)	(19,773)
Total tax provision	\$133,088	\$125,752	\$95,407



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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The provision for income taxes reconciles to the amount computed by applying the federal statutory rate to income before taxes as follows (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Tax at federal statutory rate	\$196,412	\$204,100	\$157,065
State, net of federal benefit	9,685	8,821	5,023
Research and other credits	(13,650 )	(19,853 )	(16,144 )
Change in valuation allowance	4,677	(3,750 )	(4,212 )
Impact of foreign operations	(85,766 )	(42,356 )	(42,215 )
Cost sharing adjustment	(6,696 )	(24,813 )	—
Investments in consolidated variable interest entities	25,059	1,376	—
Other	3,367	2,227	(4,110 )
Total tax provision	\$133,088	\$125,752	\$95,407

The impact of foreign operations primarily represents the difference between the actual provision for income taxes for our legal entities that operate primarily in jurisdictions that have statutory tax rates lower than the U.S. federal statutory tax rate of 35%. The most significant tax benefits from foreign operations were from the Company's earnings in Singapore and the United Kingdom, which had statutory tax rates of 17% and 20%, respectively, in the year ended January 1, 2017. The impact of foreign operations also includes the U.S. foreign tax credit impact of non-U.S. earnings and uncertain tax positions related to foreign items.

Significant components of the Company's deferred tax assets and liabilities are as follows (in thousands):

	January 1, 2017	January 3, 2016
Deferred tax assets:		
Net operating losses	\$20,419	\$35,448
Tax credits	43,245	40,590
Other accruals and reserves	23,805	42,223
Stock compensation	37,536	52,199
Deferred rent	38,310	30,355
Cost sharing adjustment	31,509	24,813
Other amortization	16,396	32,782
Other	37,622	27,727
Total gross deferred tax assets	248,842	286,137
Valuation allowance on deferred tax assets	(18,069 )	(13,392 )
Total deferred tax assets	230,773	272,745
Deferred tax liabilities:		
Purchased intangible amortization	(53,159 )	(78,270 )
Convertible debt	(37,261 )	(47,863 )
Property and equipment	(17,422 )	(15,090 )
Other	(482 )	(825 )
Total deferred tax liabilities	(108,324 )	(142,048 )
Net deferred tax assets	\$122,449	\$130,697

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. Based on the available evidence as of

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

January 1, 2017, the Company was not able to conclude it is more likely than not certain deferred tax assets will be realized. Therefore, the Company recorded a valuation allowance of \$18.1 million against certain deferred tax assets.

As of January 1, 2017, the Company had net operating loss carryforwards for federal and state tax purposes of \$14.4 million and \$284.0 million, respectively, which will begin to expire in 2019 and 2017, respectively, unless utilized prior. The Company also had federal and state tax credit carryforwards of \$44.5 million and \$90.9 million, respectively, which will begin to expire in 2025 and 2019, respectively, unless utilized prior.

Pursuant to Section 382 and 383 of the Internal Revenue Code, utilization of the Company's net operating losses and credits may be subject to annual limitations in the event of any significant future changes in its ownership structure. These annual limitations may result in the expiration of net operating losses and credits prior to utilization. The deferred tax assets as of January 1, 2017 are net of any previous limitations due to Section 382 and 383.

The Company recognizes 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, the Company follows 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 the Company. During the year ended January 1, 2017, the Company realized \$86.9 million of such excess tax benefits, and accordingly recorded a corresponding credit to additional paid-in capital. As of January 1, 2017, the Company had \$46.4 million of unrealized excess tax benefits associated with share-based compensation. Per ASU 2016-09, these tax benefits will be accounted for as a credit to retained earnings when this ASU becomes effective in the first quarter of 2017.

The Company's manufacturing operations in Singapore operate under various tax holidays and incentives that begin to expire in 2018. For the year ended January 1, 2017, these tax holidays and incentives resulted in a \$32.1 million decrease to the provision for income taxes and an increase in diluted earnings per share attributable to Illumina stockholders of \$0.22.

It is the Company's intention to indefinitely reinvest all current and future foreign earnings in order to ensure sufficient working capital to support and expand existing operations outside the United States. Accordingly, residual U.S. income taxes have not been provided on \$849.2 million of undistributed earnings of foreign subsidiaries as of January 1, 2017. In the event the Company was required to repatriate funds from outside of the United States, such repatriation would be subject to local laws, customs, and tax consequences. It is not practicable for the Company to determine the total amount of unrecognized deferred U.S. income tax liability because of the complexities associated with its hypothetical calculation.

The following table summarizes the gross amount of the Company's uncertain tax positions (in thousands):

	January 1, 2017	January 3, 2016	December 28, 2014
Balance at beginning of year	\$ 56,142	\$ 52,088	\$ 49,046
Increases related to prior year tax positions	—	2,185	426
Decreases related to prior year tax positions	(1,674 )	(1,115 )	(804 )
Increases related to current year tax positions	12,912	10,584	8,756
Decreases related to lapse of statute of limitations	(2,354 )	(7,600 )	(5,336 )
Balance at end of year	\$ 65,026	\$ 56,142	\$ 52,088

Included in the balance of uncertain tax positions as of January 1, 2017 and January 3, 2016, were \$54.6 million and \$47.1 million, respectively, of net unrecognized tax benefits that, if recognized, would reduce the Company's effective income tax rate in future periods.

Any interest and penalties related to uncertain tax positions are reflected in the provision for income taxes. The Company recognized expense of \$0.8 million, income of \$0.2 million, and expense of \$0.7 million during the years ended January 1, 2017, January 3, 2016, and December 28, 2014, respectively, related to potential interest and penalties on uncertain tax positions. The Company recorded a liability for potential interest and penalties of \$5.7 million and \$4.5 million as of January 1, 2017 and January 3, 2016, respectively.

Tax years 1997 to 2015 remain subject to future examination by the major tax jurisdictions in which the Company is subject to tax. Given the uncertainty of potential adjustments from examination as well as the potential expiration of the statute

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

of limitations, it is reasonably possible that the balance of unrecognized tax benefits could change significantly over the next 12 months. However, at this time, an estimate of the range of reasonably possible adjustments to the balance of unrecognized tax benefits cannot be determined given the number of matters and the number of years that are potentially subject to examination.

## 11. Employee Benefit Plans

### Retirement Plan

The Company has a 401(k) savings plan covering substantially all of its employees in the United States. Company contributions to the plan are discretionary. During the years ended January 1, 2017, January 3, 2016, and December 28, 2014, the Company made matching contributions of \$14.3 million, \$11.5 million, and \$9.5 million, respectively.

### Deferred Compensation Plan

The Company adopted the Illumina, Inc. Deferred Compensation Plan (the Plan) that became effective January 1, 2008. The Company's senior level employees can contribute up to 80% of their base salary and 100% of their variable cash compensation. Members of the board of directors can contribute up to 100% of their director fees and equity awards. 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.

In January 2008, the Company also established a rabbi trust for the benefit of the participants under the Plan. In accordance with authoritative guidance related to consolidation of variable interest entities and 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 January 1, 2017 and January 3, 2016, the assets of the trust were \$30.9 million and \$26.2 million, respectively, and liabilities of the Company were \$29.2 million and \$24.9 million, respectively. The assets and liabilities are classified as other assets and accrued liabilities, respectively, on the Company's consolidated balance sheets. Changes in the values of the assets held by the rabbi trust are recorded in other expense, net in the consolidated statements of income, and changes in the values of the deferred compensation liabilities are recorded in cost of revenue or operating expenses.

## 12. Segment Information, Geographic Data, and Significant Customers

The Company has two reportable segments: Core Illumina and one segment related to the combined activities of the Company's consolidated VIEs, GRAIL and Helix. The Company reports segment information based on the management approach. This approach designates the internal reporting used by the Chief Operating Decision Maker ("CODM") for making decisions and assessing performance as the source of the Company's reportable segments. The CODM allocates resources and assesses the performance of each operating segment using information about its revenues and income (losses) from operations. Based on the information used by the CODM, the Company has determined its reportable segments as follows:

Core Illumina:

Core Illumina's products and services serve customers in the research, clinical and applied markets, and enable the adoption of a variety of genomic solutions. Core Illumina includes all operations of the Company, excluding the results of its two consolidated VIEs.

Consolidated VIEs:

GRAIL: GRAIL was created to develop a blood test for early-stage cancer detection. GRAIL is currently in the early stages of developing this test and as such, has no revenues to date.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Helix: Helix was established to enable individuals to explore their genetic information by providing affordable sequencing and database services for consumers through third party partners, driving the creation of an ecosystem of consumer applications. The Company has no revenues to date.

Management evaluates the performance of the Company's operating segments based upon income (loss) from operations. The Company does not allocate expenses between segments. Core Illumina sells products and provides services to GRAIL and Helix in accordance with contractual agreements between the entities.

The following table presents the operating performance of each reportable segment (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Revenues:			
Core Illumina	\$2,428,024	\$2,219,762	\$ 1,861,358
Consolidated VIEs	—	—	—
Elimination of intersegment revenues	(29,651 )	—	—
Consolidated revenues	\$2,398,373	\$2,219,762	\$ 1,861,358
Depreciation and amortization:			
Core Illumina	\$137,585	\$126,342	\$ 112,574
Consolidated VIEs	4,345	77	—
Total depreciation and amortization	\$141,930	\$126,419	\$ 112,574
Operating income (loss):			
Core Illumina	\$683,790	\$621,215	\$ 514,711
Consolidated VIEs	(81,114 )	(8,374 )	—
Elimination of intersegment earnings	(15,644 )	—	—
Consolidated operating income	\$587,032	\$612,841	\$ 514,711

Other income and expense primarily relate to Core Illumina and the Company does not allocate income taxes to its segments.

The following table presents the total assets and capital expenditures of each reportable segment (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
Total assets:			
Core Illumina	\$4,167,230	\$3,657,953	\$ 3,339,640
Consolidated VIEs	179,725	30,447	—
Elimination of intersegment assets	(66,355 )	(653 )	—
Consolidated total assets	\$4,280,600	\$3,687,747	\$ 3,339,640
Capital expenditures:			
Core Illumina	\$238,420	\$141,607	\$ 105,996
Consolidated VIEs	22,385	1,240	—
Total capital expenditures	\$260,805	\$142,847	\$ 105,996

As of January 1, 2017, the Company had gross assets of \$13.7 million in Property and Equipment, net related to capital leases held by GRAIL and Helix.

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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company had revenue in the following regions for the years ended January 1, 2017, January 3, 2016, and December 28, 2014 (in thousands):

	Years Ended		
	January 1, 2017	January 3, 2016	December 28, 2014
United States	\$ 1,294,178	\$ 1,207,373	\$ 950,703
Europe	553,217	527,406	466,536
Asia-Pacific	456,380	379,575	342,702
Other markets	94,598	105,408	101,417
Total	\$ 2,398,373	\$ 2,219,762	\$ 1,861,358

Revenues are attributable to geographic areas based on the region of destination.

The majority of our product sales consist of consumables and instruments. For the years ended January 1, 2017, January 3, 2016, and December 28, 2014, consumable sales represented 64%, 58%, and 56%, respectively, of total revenues and instrument sales comprised 20%, 27%, and 30%, respectively, of total revenues. The Company's customers include leading genomic research centers, academic institutions, government laboratories, and hospitals, as well as pharmaceutical, biotechnology, agrigenomics, commercial molecular diagnostic laboratories, and consumer genomics companies. The Company had no customers that provided more than 10% of total revenue in the years ended January 1, 2017, January 3, 2016, and December 28, 2014.

Net long-lived assets exclude goodwill and other intangible assets since they are not allocated on a geographic basis. The Company had net long-lived assets consisting of property and equipment in the following regions as of January 1, 2017 and January 3, 2016 (in thousands):

	January 1, January 3,	
	2017	2016
United States	\$ 636,318	\$ 273,193
Singapore	44,263	30,127
United Kingdom	27,490	33,271
Other countries	5,263	6,103
Total	\$ 713,334	\$ 342,694



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ILLUMINA, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

## 13. Quarterly Financial Information (unaudited)

The following financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results and cash flows of interim periods. All quarters for fiscal years 2016 and 2015 ended January 1, 2017 and January 3, 2016 were 13 weeks, except for the fourth quarter of fiscal year 2015, which was 14 weeks. Summarized quarterly data for fiscal years 2016 and 2015 are as follows (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2016				
Total revenue	\$571,763	\$600,124	\$607,139	\$619,347
Gross profit	\$397,054	\$423,805	\$426,150	\$419,439
Consolidated net income	\$87,219	\$116,394	\$116,935	\$107,542
Net income attributable to Illumina stockholders	\$89,587	\$120,412	\$128,888	\$123,762
Earnings per share attributable to Illumina stockholders:				
Basic	\$0.61	\$0.83	\$0.88	\$0.84
Diluted	\$0.60	\$0.82	\$0.87	\$0.84
2015				
Total revenue	\$538,565	\$539,378	\$550,271	\$591,548
Gross profit	\$375,027	\$376,365	\$387,539	\$410,359
Consolidated net income	\$136,658	\$102,247	\$115,621	\$102,864
Net income attributable to Illumina stockholders	\$136,658	\$102,247	\$118,177	\$104,477
Earnings per share attributable to Illumina stockholders:				
Basic	\$0.95	\$0.71	\$0.81	\$0.72
Diluted	\$0.92	\$0.69	\$0.79	\$0.70

## ITEM 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

## ITEM 9A. 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.

Based on management's evaluation (under the supervision and with the participation of our chief executive officer (CEO) and chief financial officer (CFO)), as of the end of the period covered by this report, our CEO and CFO concluded that 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 (the Exchange Act)), are effective to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

During the fourth quarter of 2016, we continued to monitor and evaluate the operating effectiveness of key controls related to process enhancements arising out of our enterprise resource planning system implementation in 2015. There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that materially affected or are reasonably likely to materially affect internal control over financial reporting.

#### MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Because of its inherent limitations, internal control over financial

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reporting may not prevent or detect all misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

We conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on our evaluation under the framework in Internal Control — Integrated Framework, our management concluded that our internal control over financial reporting was effective as of January 1, 2017. The effectiveness of our internal control over financial reporting as of January 1, 2017 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Illumina, Inc.

We have audited Illumina, Inc.'s internal control over financial reporting as of January 1, 2017, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Illumina, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Illumina, Inc. maintained, in all material respects, effective internal control over financial reporting as of January 1, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the accompanying consolidated balance sheets of Illumina, Inc. as of January 1, 2017 and January 3, 2016, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three fiscal years in the period ended January 1, 2017 of Illumina, Inc. and our report dated February 13, 2017 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP  
San Diego, California  
February 13, 2017



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ITEM 9B. Other Information.

None.

PART III

ITEM 10. Directors, Executive Officers, and Corporate Governance.

(a) Identification of Directors. Information concerning our directors is incorporated by reference from the section entitled “Proposal One: Election of Directors,” “Information About Directors,” “Director Compensation,” and “Board of Directors and Corporate Governance” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

(b) Identification of Executive Officers. Information concerning our executive officers is incorporated by reference from the section entitled “Executive Officers” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

(c) Compliance with Section 16(a) of the Exchange Act. Information concerning compliance with Section 16(a) of the Securities Exchange Act of 1934 is incorporated by reference from the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

(d) Information concerning the audit committee financial expert as defined by the SEC rules adopted pursuant to the Sarbanes-Oxley Act of 2002 is incorporated by reference from the section entitled “Board of Directors and Corporate Governance” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

Code of Ethics

We have adopted a code of ethics for our directors, officers, and employees, which is available on our website at [www.illumina.com](http://www.illumina.com) in the Corporate Governance portal of the Investor Relations section under “Company.” A copy of the Code of Ethics is available in print free of charge to any stockholder who requests a copy. Interested parties may address a written request for a printed copy of the Code of Ethics to: Corporate Secretary, Illumina, Inc., 5200 Illumina Way, San Diego, California 92122. We intend to satisfy the disclosure requirement regarding any amendment to, or a waiver from, a provision of the Code of Ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, by posting such information on our website. The information on, or that can be accessed from, our website is not incorporated by reference into this report.

ITEM 11. Executive Compensation.

Information concerning executive compensation is incorporated by reference from the sections entitled “Compensation Discussion and Analysis,” “Director Compensation,” and “Executive Compensation” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information concerning the security ownership of certain beneficial owners and management and information covering securities authorized for issuance under equity compensation plans is incorporated by reference from the sections entitled “Stock Ownership of Principal Stockholders and Management,” “Executive Compensation,” and “Equity Compensation Plan Information” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence.

Information concerning certain relationships and related transactions, and director independence is incorporated by reference from the sections entitled “Proposal One: Election of Directors,” “Information About Directors,” “Director Compensation,” “Executive Compensation,” and “Certain Relationships and Related Party Transactions” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

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ITEM 14. Principal Accountant Fees and Services.

Information concerning principal accountant fees and services is incorporated by reference from the sections entitled “Proposal Two: Ratification of Appointment of Independent Registered Public Accounting Firm” and “Independent Registered Public Accountants” to be contained in our definitive Proxy Statement with respect to our 2017 Annual Meeting of Stockholders to be filed with the SEC no later than May 1, 2017.

PART IV

ITEM 15. Exhibits, Financial Statement Schedules.

1. Financial Statements: See “Index to Consolidated Financial Statements” in Part II, Item 8 of this Form 10-K.
2. Financial Statement Schedule: See “Schedule II — Valuation and Qualifying Accounts and Reserves” in this section of this Form 10-K.
3. Exhibits: The exhibits listed in the accompanying index to exhibits are filed or incorporated by reference as part of this Form 10-K.



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## SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

	Balance at Beginning of Period (In thousands)	to Additions Charged Expenses/(Reductions from Revenue)(1)	Deductions(2)	Balance at End of Period
Year ended January 1, 2017				
Allowance for doubtful accounts	\$8,213	2,953	(6,932)	) \$4,234
Year ended January 3, 2016				
Allowance for doubtful accounts	\$5,459	3,213	(459)	) \$8,213
Year ended December 28, 2014				
Allowance for doubtful accounts	\$3,680	1,870	(91)	) \$5,459

(1) Additions to and reductions from allowance for doubtful accounts are recorded to selling, general and administrative expense.

(2) Deductions for allowance for doubtful accounts are for accounts receivable written off.

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## INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			Filing Date	Filed Herewith
		Form	File Number	Exhibit		
3.1	Amended and Restated Certificate of Incorporation	8-K	000-30361	3.1	9/23/2008	
3.2	Amended and Restated Bylaws	8-K	001-35406	3.2	1/11/2017	
4.1	Specimen Common Stock Certificate	S-1/A	333-33922	4.1	7/3/2000	
4.2	Indenture related to the 0% Convertible Senior Notes due 2019, dated as of June 11, 2014, between Illumina and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-35406	4.1	6/11/2014	
4.3	Indenture related to the 0.5% Convertible Senior Notes due 2021, dated as of June 11, 2014, between Illumina and The Bank of New York Mellon Trust Company, N.A., as trustee	8-K	001-35406	4.2	6/11/2014	
4.4	First Supplemental Indenture related to the 0.5% Convertible Senior Notes due 2021, dated as of August 27, 2014, between Illumina and The Bank of New York Mellon Trust Company, N.A., as trustee	10-Q	001-35406	4.1	10/29/2014	
+10.1	Form of Indemnification Agreement between Illumina and each of its directors and executive officers	10-Q	000-30361	10.55	7/25/2008	
+10.2	Amended and Restated Change in Control Severance Agreement between Illumina and Jay T Flatley, dated October 22, 2008	10-K	000-30361	10.33	2/26/2009	
+10.3	Form of Change in Control Severance Agreement between Illumina and each of its executive officers	10-K	000-30361	10.34	2/26/2009	
+10.4	2000 Employee Stock Purchase Plan, as amended and restated through February 2, 2012	10-K	001-35406	10.4	2/24/2012	
+10.5	2005 Stock and Incentive Plan, as amended and restated through May 29, 2013	S-8	333-190322	4.5	8/2/2013	
+10.6	Form of Restricted Stock Unit Agreement for Non-Employee Directors under 2005 Stock and Incentive Plan	10-K	001-35406	10.6	2/24/2012	
+10.7	Form of Stock Option Agreement for Non-Employee Directors under 2005 Stock and Incentive Plan	10-K	001-35406	10.7	2/24/2012	
+10.8	Form of Restricted Stock Unit Agreement for Employees under 2005 Stock and Incentive Plan	10-K	001-35406	10.8	2/24/2012	
+10.9	Form of Stock Option Agreement for Employees under 2005 Stock and Incentive Plan	10-K	001-35406	10.9	2/24/2012	
+10.10	New Hire Stock and Incentive Plan, as amended and restated through October 28, 2009	10-K	000-30361	10.7	2/26/2010	
10.11	License Agreement, effective as of May 6, 1998, between Tufts University and Illumina	10-Q	000-30361	10.5	5/3/2007	

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## INDEX TO EXHIBITS — (Continued)

Exhibit Number	Exhibit Description	Incorporated by Reference			Filing	Filed
		Form	File Number	Exhibit	Date	Herewith
+10.12	The Solexa Unapproved Company Share Option Plan	8-K	000-30361	99.3	11/26/2007	
+10.13	The Solexa Share Option Plan for Consultants	8-K	000-30361	99.4	11/26/2007	
+10.14	Solexa Limited Enterprise Management Incentive Plan	8-K	000-30361	99.5	11/26/2007	
+10.15	Amended and Restated Solexa 2005 Equity Incentive Plan	10-K	000-30361	10.25	2/26/2009	
+10.16	Amended and Restated Solexa 1992 Stock Option Plan	10-K	000-30361	10.26	2/26/2009	
10,170	Amended and Restated Lease between BMR-9885 Towne Centre Drive LLC and Illumina for the 9885 Towne Centre Drive property, dated January 26, 2007	10-Q	000-30361	10.41	5/3/2007	
10.18	Lease between BMR-9885 Towne Centre Drive LLC and Illumina for the 9865 Towne Centre Drive property, dated January 26, 2007	10-Q	000-30361	10.42	5/3/2007	
10.19	Amended and Restated Lease Agreement, dated March 27, 2012, between ARE-SD Region No. 32, LLC and Illumina	10-Q	001-35406	10.1	5/3/2012	
10.20	First Amendment to Amended and Restated Lease Agreement, dated March 27, 2012, between ARE-SD Region No. 32, LLC and Illumina	10-K	001-35406	10.23	2/18/2015	
10.21	Second Amendment to Amended and Restated Lease Agreement, dated March 27, 2012, between ARE-SD Region No. 32, LLC and Illumina	10-K	001-35406	10.24	2/18/2015	
+10.22	Deferred Compensation Plan, effective December 1, 2007	14D-9	005-60457	99(e)(6)	2/7/2012	
10.23	Lease between BMR-Lincoln Centre LP and Illumina, dated December 30, 2014	10-K	001-35406	10.26	2/18/2015	
10.24	Pooled Patents Agreement between Illumina and Sequenom, Inc., dated December 2, 2014 (with certain confidential portions omitted)	10-K	001-35406	10.27	2/18/2015	
10.25	Agreement for Lease between Granta Park Park Jco 1 Limited and Illumina, dated June 25, 2015	10-Q	001-35406	10.1	7/31/2015	
10.26	Third Amendment to Lease between ARE-SD Region No. 32, LLC and Illumina, dated September 2, 2015	10-K	001-35406	10.29	3/2/2016	
10.27	First Amendment to Lease between BMR-Lincoln Center LP and Illumina, dated February 23, 2016	10-K	001-35406	10.30	3/2/2016	
10.28	Fourth Amendment to Lease between ARE-SD Region No. 32, LLC and Illumina, dated April 14, 2016					X
10.29	Second Amendment to Lease between BMR-Lincoln Center LP and Illumina dated August 15, 2016					X

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## INDEX TO EXHIBITS — (Continued)

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	File Number	Filing Date Filed Herewith
10.30	Deed of Variation to the Agreement for Lease between Granta Park Jco 1 Limited and Illumina dated October 24, 2016			X
10.31	Separation Agreement and General Release of All Claims between Illumina and Christian Henry			X
21.1	Subsidiaries of Illumina			X
23.1	Consent of Independent Registered Public Accounting Firm			X
24.1	Power of Attorney (included on the signature page)			X
31.1	Certification of Francis A. deSouza pursuant to Section 302 of the Sarbanes-Oxley Act of 2002			X
31.2	Certification of Sam A. Samad pursuant to Section 302 of the Sarbanes-Oxley Act of 2002			X
32.1	Certification of Frances A. deSouza pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002			X
32.2	Certification of Sam A. Samad pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002			X
101.INS	XBRL Instance Document			X
101.SCH	XBRL Taxonomy Extension Schema			X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase			X
101.LAB	XBRL Taxonomy Extension Label Linkbase			X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase			X
101.DEF	XBRL Taxonomy Extension Definition Linkbase			X

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+ Management contract or corporate plan or arrangement

## Supplemental Information

No Annual Report to stockholders or proxy materials has been sent to stockholders as of the date of this report. The Annual Report to stockholders and proxy material will be furnished to our stockholders subsequent to the filing of this Annual Report on Form 10-K and we will furnish such material to the SEC at that time.

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SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) 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, on February 13, 2017.

ILLUMINA, INC.

By /s/ FRANCIS A. DESOUZA  
Francis A. deSouza  
President and Chief Executive Officer

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February 13, 2017

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Francis A. deSouza and Sam A. Samad, and each or any one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their, his, or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ FRANCIS A. DESOUZA Francis A. deSouza	President, Chief Executive Officer, and Director (Principal Executive Officer)	February 13, 2017
/s/ SAM A. SAMAD Sam A. Samad	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 13, 2017
/s/ MICHEL BOUCHARD Michel Bouchard	Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 13, 2017
/s/ JAY T. FLATLEY Jay T. Flatley	Executive Chairman of the Board of Directors	February 13, 2017
/s/ FRANCES ARNOLD Frances Arnold	Director	February 13, 2017
/s/ A. BLAINE BOWMAN A. Blaine Bowman	Director	February 13, 2017
/s/ DANIEL M. BRADBURY Daniel M. Bradbury	Director	February 13, 2017
/s/ CAROLINE D. DORSA Caroline D. Dorsa	Director	February 13, 2017
/s/ KARIN EASTHAM Karin Eastham	Director	February 13, 2017
/s/ ROBERT S. EPSTEIN Robert S. Epstein	Director	February 13, 2017
/s/ PHILIP W. SCHILLER	Director	February 13, 2017

Philip W. Schiller

/s/ ROY WHITFIELD  
Roy Whitfield

Director

February 13, 2017

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