SYNOPSYS INC Form 10-K December 22, 2008

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM 10-K

(Mark One)

> ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

> > For the year ended October 31, 2008

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 0-19807

# SYNOPSYS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

incorporation or organization)

56-1546236

(I.R.S. Employer Identification No.)

700 East Middlefield Road, Mountain View, California 94043

(Address of principal executive offices, including zip code)

(650) 584-5000

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class Common Stock, \$0.01 par value Name of Each Exchange on Which Registered

NASDAQ Global Select Market

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  $\circ$  No o

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 o No ý

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  $\acute{y}$  No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K ( 229.405 of this chapter) 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. ý

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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	ý	Accelerated filer	0	Non-accelerated filer o	Smaller Repo	orting	
				(Do not check if a smaller	Compan	у	
				reporting company)			
te by check mark whether	the regis	strant is a shell com	ipany (a	s defined in Rule 12b-2 of the Ex	change Act).	Yes o	No ý

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter was approximately \$2,463,186,598. Aggregate market value excludes an aggregate of 37,250,499 shares of common stock held by officers and directors and by each person known by the registrant to own 5% or more of the outstanding common stock on such date. Exclusion of shares held by any of these persons should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

On December 10, 2008, 141,976,386 shares of the registrant's Common Stock, \$0.01 par value, were outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

Indicate

Portions of the registrant's Proxy Statement relating to the registrant's 2009 Annual Meeting of Stockholders, scheduled to be held on February 27, 2009, are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. Except as expressly incorporated by reference, the registrant's Proxy Statement shall not be deemed to be part of this report.

# SYNOPSYS, INC. ANNUAL REPORT ON FORM 10-K Year ended October 31, 2008

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#### PART I

This Annual Report on Form 10-K (this Form 10-K), and in particular Item 1. "Business" and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations," includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 (the Securities Act) and Section 21E of the Securities Exchange Act of 1934 (the Exchange Act). These statements include, but are not limited to, statements concerning: our business, product and platform strategies, expectations regarding previous and future acquisitions; completion of development of our unfinished products, or further development or integration of our existing products; continuation of current industry trends towards vendor consolidation; expectations regarding our license mix; expectations regarding customer interest in more highly integrated tools and design flows; expectations of the success of our intellectual property and design for manufacturing initiatives; expectations concerning recent completed acquisitions; expectations regarding the likely outcome of the Internal Revenue Service's proposed net tax deficiencies for fiscal years 2000 through 2004 and other outstanding litigation; expectations that our cash, cash equivalents and short-term investments and cash generated from operations will satisfy our business requirements for the next 12 months; and our expectations of our future liquidity requirements. Our actual results could differ materially from those projected in the forward-looking statements as a result of a number of factors, risks and uncertainties discussed in this Form 10-K, including, without limitation, those identified below in Part I, Item 1A of this Form 10-K. The words "may," "will," "could," "would," "anticipate," "expect," "intend," "believe," "continue," or the negatives of these terms, or other comparable terminology and similar expressions identify these forward-looking statements. However, these words are not the only means of identifying such statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. The information included herein is given as of the filing date of this Form 10-K with the Securities and Exchange Commission (SEC) and future events or circumstances could differ significantly from these forward-looking statements. Accordingly, we caution readers not to place undue reliance on these statements. Unless required by law, we undertake no obligation to update publicly any forward-looking statements. All subsequent written or oral forward-looking statements attributable to our company or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. Readers are urged to carefully review and consider the various disclosures made in this report and in other documents we file from time to time with the SEC that attempt to advise interested parties of the risks and factors that may affect our business.

Fiscal Year End. Our fiscal year ends on the Saturday nearest October 31. For 2008, November 1, 2008 was the fiscal year end. For presentation purposes in this Form 10-K, in general we refer to October 31 as the end of a fiscal year.

#### Item 1. Business

#### Introduction

Synopsys, Inc. (Synopsys) is a world leader in electronic design automation (EDA) software and related services for semiconductor design companies. We deliver technology-leading semiconductor design and verification software platforms and integrated circuit (IC) manufacturing software products to the global electronics market, enabling the development and production of complex systems-on-chips (SoCs). In addition, we provide intellectual property (IP), system-level design hardware and software products, and design services to simplify the design process and accelerate time-to-market for our customers. Finally, we provide software and services that help customers prepare and optimize their designs for manufacturing.

We incorporated in 1986 in North Carolina and reincorporated in Delaware in 1987. Our headquarters are located at 700 East Middlefield Road, Mountain View, California 94043, and our telephone number there is (650) 584-5000. We have more than 60 offices worldwide.

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Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Proxy Statements relating to our annual meetings of stockholders, Current Reports on Form 8-K and amendments to these reports, as well as filings made by our executive officers and directors, are available on our Internet website (*www.synopsys.com*) free of charge. We post these reports to our website as soon as practicable after we file them with, or furnish them to, the SEC. The contents of our website are not part of this Form 10-K.

#### The Role of EDA in the Electronics Industry

Technology advances in the semiconductor industry have steadily increased the feature density, speed, power efficiency and functional capacity of semiconductors (also referred to as integrated circuits, ICs or chips).

Since the early 1960s, steadily decreasing feature widths (the widths of the wires imprinted on the chips that form the transistors) and other developments have enabled IC manufacturers to follow "Moore's law," approximately doubling every two years the number of transistors that can be placed on a chip.

Chips have become more power efficient to address demand for smaller and more powerful handheld devices such as cell phones, digital cameras, music players and personal digital assistants.

Increasingly, single SoCs can handle functions formerly performed by multiple ICs attached to a printed circuit board.

Combined, these advances in semiconductor technology have enabled the development of lower-cost, higher-performance computers, wireless communications networks, hand held devices, internet routers and a wealth of other electronic devices. Each advance, however, has introduced new challenges for all participants in semiconductor production, from designers and manufacturers to equipment manufacturers and EDA software suppliers, such as Synopsys.

These technological challenges have been accompanied by significant business challenges, increased globalization leading customers to source their products in lower cost areas, and consumer demand for cheaper and more advanced products.

We believe Synopsys is well positioned to help our customers meet these multi-faceted challenges. We have a broad portfolio of solutions that are highly integrated to solve our customers' most advanced technological problems. We have a large number of global service and support engineers that help our customers complete their chip designs. We believe our combination of advanced technology and global scale, along with our solid business execution, gives us a competitive advantage.

#### The IC Design Process

EDA software enables designers to create complex semiconductors. In simplified form, the IC design process consists of the steps described below.

*System Design.* The first step in a typical IC Design is determining the features and specifications of the chip, its overall architecture, and the division of device functionality between hardware and software. Once the architecture is created and the division between hardware and software made, software engineers develop the embedded software applications that drive an increasing proportion of the device functionality, while the chip designers develop the functionality and configuration of the semiconductor itself.

*Register Transfer Level (RTL) Design.* RTL design is the process of capturing the intended design functionality created at the system level using a specialized high level computer language, typically SystemVerilog, Verilog or VHDL.

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Logic Design. Logic design, or "synthesis," programs convert the RTL code into a logical diagram of the chip, and produce a data file known as a netlist describing the various groups of transistors, or gates, to be built on the chip.

*Functional Verification.* At the RTL level of IC design, the designer uses functional verification tools such as RTL simulators and testbench automation and other verification tools to verify that the design will function as intended. The increasing size and complexity of today's ICs and SoCs have vastly increased the time and effort required to verify chip designs, with verification estimated to consume 60% to 70% of total design time. As a result, designers are demanding solutions that can handle increasing complexity at ever higher speeds, and that can reduce verification risk (i.e., find design bugs before designs are taken into production).

*Rapid Prototyping.* Rapid prototyping is a form of functional verification that uses hardware to accelerate verification in order to accommodate these significant demands. It is also used to accelerate the development of embedded software by software engineers by essentially providing a "prototype" of the chip well before the chip is completed allowing software development to begin many months earlier than would otherwise be the case.

*Physical Design.* In the physical design stage, the designer plans the physical location of all of the transistors and each of the wires connecting them with "place and route" products. The designer first determines the location on the chip die for each block of the chip, as well as the location for each transistor within each block, a process known as "placement." In many designs, placement is performed in conjunction with logic synthesis, a process known as "physical synthesis." After placement the designer adds the connections between the transistors, a process known as "routing." With increasing gate counts and design complexity, seamless correlation among physical design and other tools is becoming increasingly important.

*Physical Verification.* Before sending the chip design files to a manufacturer for fabrication, the designer must perform a series of further verification steps, checking to make sure that the final design complies with the specific requirements of the fabrication facility that will manufacture the chip.

*Manufacturing.* The design is then translated to a series of photomasks, or physical representations of the design. IC manufacturers use photomasks to produce the silicon wafer containing individual ICs. As IC wire or "feature" sizes shrink, this translation is becoming more and more difficult. These challenges are exacerbated because in advanced designs the feature widths can be smaller than the wavelength of the light used in the manufacturing process, requiring advanced software tools and techniques such as optical proximity correction to alter the mask to ensure the desired features can still be produced. Technology computer-aided design, or TCAD, tools are also used to model individual features or "devices" within the design to help ensure manufacturability. Finally, various yield enhancement tools and technologies are employed at this stage to increase the number of usable ICs contained on each silicon wafer.

Intellectual Property Reuse. As IC designs continue to grow in size and complexity, designers have found that inserting pre-designed and pre-verified design blocks into the design can be an effective way to help reduce overall design cost and cycle time by reducing the number of chip elements that must be designed and comprehensively verified. Usually, such IP blocks represent functions that can be used in multiple applications and ICs, including microprocessors, digital signal processors, or connectivity IP that support such protocols as USB, PCI Express or Ethernet.

# Strategy

With increasing chip complexity, designers are finding it more and more difficult to complete each of the steps described above sequentially, and must repeat some steps, such as verification, multiple

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times before finishing the design. Each such iteration can add significant costs and makes it more difficult for the designer to meet time-to-market goals. Synopsys addresses these difficulties by integrating our point tools into product platforms, enabling significantly improved correlation and interoperability as the design moves from one step to the next.

In addition, smaller and smaller chip feature sizes require designers to take manufacturing issues into account earlier in the production process than ever before. Synopsys has invested heavily in manufacturing-related technologies that help ensure designs are still able to be manufactured after delivery to the fabrication facility at an acceptable yield.

Also, many hardware products contain increasingly complex embedded software components that must be developed after the chip is designed. We offer system-level products that permit designers to develop such software earlier in the IC design process, speeding overall development time.

In addition, designers are under increasing pressure to release their products commercially more quickly than ever before as a result of accelerating global competition. We address this issue by making available a large portfolio of high quality, pre-verified standards-based and other IP, which designers can use to complete their design faster and with greater confidence.

Finally, designers rely on assistance from EDA engineers to help them complete their chips on time and with high quality. We help customers with both design services and application engineer support.

Our strategy is to help our customers get their products to market quickly and efficiently. In order to remain at the leading edge of technology development, we believe it is important to continually invest in research and development, as well as targeted acquisitions. We also believe that offering customer support on a global basis is instrumental to addressing our customers' needs.

#### **Products and Services**

Our products and services are divided into five common groupings: Galaxy Design Platform and Discovery Verification Platform (which are typically sold and reported together as Core EDA), Intellectual Property (IP) and System-Level Solutions, Manufacturing Solutions, and Professional Services.

#### Galaxy Design Platform

Our Galaxy Design Platform provides our customers with a single, integrated IC design solution which includes industry-leading individual products and which incorporates common libraries and consistent timing, delay calculation and constraints throughout the design process. The platform uses our open Milkyway database and allows designers the flexibility to integrate internally developed and third-party tools. With this advanced functionality, common foundation and flexibility, our Galaxy Design platform helps reduce design times, decrease integration costs and minimize the risks inherent in advanced, complex IC designs. Our solutions span both digital and analog/mixed-signal designs.

The Galaxy Design Platform includes:

*Design Compiler*® logic synthesis product used by a broad range of IC design companies to optimize their designs for performance and area.

Synplify synthesis product used to optimize designs of field programmable gate arrays (FPGAs) for performance and area.

*IC Compiler* physical design solution, which unifies previously separate digital IC design operations by providing concurrent physical synthesis, clock-tree synthesis, routing, yield

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optimization and sign-off correlation and delivering significant improvements in design performance and productivity.

*Galaxy Custom Designer* physical design solution for analog, mixed-signal designs, launched in September 2008, developed to work with IC Compiler allowing exchange of vital information during the design process and enhancing productivity.

*PrimeTime®/PrimeTime®* SI timing analysis products that measure and analyze the speed at which a design will operate when it is fabricated. The PrimeTime SI tool analyzes the effect of cross-talk and noise on timing, an increasingly important issue at chip geometries of 130 nanometers and below.

PrimeYield tool suite for manufacturing yield enhancement.

*Star-RCXT* extraction solution for analyzing IC layout data and determining key electrical characteristics of a chip, such as capacitance and resistance.

*Hercules* physical verification product family, which performs hierarchical design-rule checking, electrical rule checking and layout versus schematic verification. *Discovery Verification Platform* 

Our Discovery Verification platform combines our simulation and verification products and design-for-verification methodologies, and provides a consistent control environment to help significantly improve the speed, breadth and accuracy of our customers' verification efforts. Our solutions span both digital and analog/mixed-signal designs.

The Discovery Verification Platform includes:

*VCS*® comprehensive RTL verification solution, which includes technologies that support model development, testbench creation, coverage feedback and debugging techniques.

*Formality*® formal verification sign-off solution, which compares two versions of a design to determine if they are equivalent.

*NanoSim*® FastSPICE circuit simulation product for analog, mixed signal and digital IC verification, which offers high performance and capacity for pre- and post-layout full-chip circuit simulation, timing and power analysis.

*HSIM*® hierarchical FastSPICE circuit simulation product for analog, mixed-signal and digital IC verification, which offers pre and post-layout full-chip circuit simulation and memory verification.

*HSPICE*® circuit simulator, which offers high-accuracy, transistor-level circuit simulation, thereby enabling designers to better predict the timing, power consumption, functionality and analog performance of their designs.

#### Intellectual Property (IP) and System-Level Solutions

Synopsys' IP portfolio includes our IP products and components. Responding to the portfolio demands of designers seeking solutions to reduce their design risk and time-to-market, Synopsys offers a large portfolio of standards-based and other IP, including:

*DesignWare*® *Library*, an extensive collection of infrastructure IP including datapath generators, AMBA 2.0 and AMBA 3 components and peripherals, microcontrollers, IP for common chip functions and verification IP.

VCS Verification Library, which supports SystemVerilog and coverage-driven, constrained-random verification, is one of the industry's most comprehensive libraries of verification IP for the most

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important industry connectivity protocol standards, including USB, PCI, Serial ATA, Ethernet, AMBA and OCP.

*DesignWare Cores* are pre-designed and pre-verified digital logic and mixed-signal blocks that implement important industry connectivity protocol standards, including USB, certified Wireless USB, PCI, Serial ATA, DDR2, Ethernet and mobile storage standards.

Synopsys' System-Level Solutions currently enable customers to, among other things, accelerate verification and embedded software development. These solutions include:

Virtual platforms that are fully functional software models of embedded systems, enabling pre-silicon software development and software-driven system validation.

*Innovator* is an integrated tool environment for developing, running and debugging virtual platforms. The DesignWare System-Level Library provides transaction-level models for the creation of virtual platforms.

*Confirma* rapid prototyping system, a combination of hardware and software, which accelerates functional verification of large designs and can be used to accelerate development of embedded software on devices, thereby speeding a customer's time to market.

#### Manufacturing Solutions

Our Manufacturing Solutions products and technologies address the mask-making and yield enhancement of very small geometry IC, as well as very high-level modeling of physical effects within the ICs. Our Manufacturing Solutions grouping includes the following products:

*Technology-CAD or TCAD* products, which precisely model individual structures or devices within an IC design to improve manufacturability at small geometries. We see TCAD tools as increasingly important to help customers shorten the time to ramp up their production yields, and therefore reduce their manufacturing costs.

*Proteus OPC/InPhase* optical proximity correction (OPC) products which embed and verify corrective features in an IC design and masks to improve manufacturing results for subwavelength feature width designs. OPC products change mask features to compensate for distortions caused by optical diffraction and resist process effects.

*CATS*® mask data preparation product that takes a final IC design and "fractures" it into the physical features that will be included in the photomasks to be used in manufacturing.

*Yield Management* products allow access to fab data to help accelerate the process by which customers identify, characterize and eliminate sources of failure throughout the design process.

# Professional Services and Other

Synopsys provides a broad portfolio of consulting and design services covering all critical phases of the SoC development process. These services are tightly aligned with our products and solutions to advance customers' learning curves, help develop and deploy advanced methodologies, and accelerate the implementation of their chips. We offer customers a variety of engagement models to address their project-specific and long-term needs, from on-site assistance to full turnkey development. Synopsys also provides a range of customer education services.

#### **Customer Service and Technical Support**

A high level of customer service and support is critical to the adoption and successful use of our products. We provide technical support for our products through both field-based and corporate-based application engineering teams. Customers who purchase Technology Subscription Licenses (TSLs) receive software maintenance services bundled with their license fee. Customers who purchase term licenses and perpetual

licenses may purchase these services separately. See Product Sales and Licensing Agreements below.

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Software maintenance services include minor product enhancements, bug fixes and access to our technical support center for primary support. Software maintenance also includes access to SolvNet, our web-based support solution that gives customers access to Synopsys' complete design knowledge database. Updated daily, SolvNet includes documentation, design tips and answers to user questions. Customers can also engage, for additional charges, our worldwide network of applications consultants for additional support needs.

In addition, Synopsys also offers training workshops designed to increase customer design proficiency and productivity with our products. Workshops cover Synopsys products and methodologies used in our design and verification flows, as well as specialized modules addressing system design, logic design, physical design, simulation and test. We offer regularly scheduled public and private courses in a variety of locations worldwide, as well as Virtual Classroom on-demand and live online training.

#### **Product Warranties**

We generally warrant our products to be free from defects in media and to substantially conform to material specifications for a period of 90 days for our software products and for up to one year for our hardware products. We also typically provide our customers limited indemnities with respect to claims that their use of our design and verification software products infringe on United States patents, copyrights, trademarks or trade secrets. We have not experienced material warranty or indemnity claims to date, although we are currently defending some of our customers against claims that their use of one of our products infringes on a patent held by a Japanese electronics company.

#### Support for Industry Standards

We actively create and support standards that help our customers increase productivity, facilitate efficient design flows, improve interoperability of tools from different vendors, and ensure connectivity, functionality and interoperability of IP building blocks. Standards in the electronic design industry can be established by formal accredited organizations, from industry consortia, by company licensing made available to all, from de facto usage, or through open source licensing.

Synopsys' products support more than 60 standards, including the most commonly used hardware description languages: SystemVerilog, Verilog, VHDL, and SystemC. Our products utilize numerous industry standard data formats, application programming interfaces, and databases for the exchange of design data among our tools, other EDA vendors' products, and applications that customers develop internally. We also comply with a wide range of industry standards within our IP product family to ensure usability and interconnectivity.

#### Sales, Distribution and Backlog

We market our products and services primarily through direct sales in the United States and principal foreign markets. We typically distribute our software products and documentation to customers electronically, but provide physical media (i.e., CD-ROMs) when requested by the customer.

We maintain sales/support centers throughout the United States. Outside the United States, we maintain sales, support or service offices in Canada, multiple countries in Europe, Israel, Japan, and other countries in Asia. Our foreign headquarters is located in Dublin, Ireland. Our offices are further described under Part I, Item 2. *Properties*.

In fiscal 2008, 2007 and 2006, an aggregate of 50%, 50% and 49%, respectively, of Synopsys' total revenue was derived from sales outside of the United States. Additional information relating to domestic and foreign operations, including revenue and long-lived assets by geographic area, is contained in Note 11 of *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data* and is included herein.

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Synopsys' aggregate backlog was approximately \$2.6 billion on October 31, 2008, representing a 4% increase from backlog of \$2.5 billion on October 31, 2007. This increase is primarily due to the strength of the Japanese yen against the U.S. dollar. Aggregate backlog represents the portion of committed orders that has not yet been recognized as revenue. We expect backlog to fluctuate from year to year for several reasons, including specific timing and duration of large customer agreements and the schedule of when portions of that backlog are recognized as revenue. As an illustration, for a single customer contract, associated backlog is high at the beginning of a renewable contract, low just prior to renewal of the contract and high again when the contract is renewed. Low backlog attributable to a particular contract is typically associated with an impending renewal and may not be an indicator of likelihood of renewal or future revenue from such customer. Accordingly, we expect aggregate backlog to fluctuate from year to year depending upon the number and dollar amount of contracts at particular stages in their renewal cycle and such fluctuations are not a reliable indicator of future sales. Furthermore, backlog, particularly longer-term backlog, may not be a reliable predictor of our future sales as business conditions may change and technologies may evolve, and customers may seek to renegotiate their arrangements. For this and other reasons, we may not be able to recognize expected revenue from backlog when anticipated. We have not historically experienced material order cancellations.

The following table summarizes the revenue attributable to our five common groupings, or platforms, established for management reporting purposes as a percentage of total revenue for the last three fiscal years. We include revenue from companies or products we have acquired during the periods covered from the acquisition date through the end of the relevant periods. For presentation purposes, we allocate maintenance revenue, which represented approximately 5%, 6% and 9% of our total revenue in fiscal 2008, 2007 and 2006, respectively, to the products to which those support services related.

	FY 2008	FY 2007	FY 2006
Core EDA(1)	75%	75%	76%
Intellectual Property and System-Level Solutions	8%	8%	8%
Manufacturing Solutions	12%	12%	11%
Professional Services and Other	5%	5%	5%
Consolidated	100%	100%	100%

(1)

Core EDA is comprised of our Galaxy Design Platform and Discovery Verification Platform.

Revenue derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 11% of our total revenue for each of fiscal 2008, 2007 and 2006.

#### **Research and Development**

Our future performance depends in large part on our ability to further integrate our design and verification platforms and to expand our manufacturing, IP and system-level product offerings. Research and development on existing and new products is primarily conducted within each product group. We also look to targeted acquisitions to augment our own research and development efforts.

During fiscal 2008, 2007 and 2006, research and development expenses, excluding capitalized software development costs, were \$394.7 million, \$379.2 million and \$370.6 million, respectively. Synopsys' capitalized software development costs were approximately \$3.0 million, \$2.3 million and \$3.5 million in fiscal 2008, 2007 and 2006, respectively.

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# Competition

The EDA industry is highly competitive. We compete against other EDA vendors and against our customers' own design tools and internal design capabilities. In general, we compete principally on technology leadership, product quality and features (including ease-of-use), license terms, post-contract customer support, interoperability with our own and other vendors' products, price and payment terms.

Our competitors include EDA vendors that offer varying ranges of products and services, primarily Cadence Design Systems, Inc., Mentor Graphics Corporation and Magma Design Automation, Inc. We also compete with other EDA vendors, including continual new entrants to the marketplace, that offer products focused on one or more discrete phases of the IC design process, as well as with customers' internally developed design tools and capabilities. No one factor drives an EDA customer's buying decision, and we compete on all fronts to capture a higher portion of our customers' budget.

## **Product Sales and Licensing Agreements**

We typically license our software to customers under non-exclusive license agreements that transfer title to the media only and restrict use of our software to specified purposes within specified geographical areas. The majority of our licenses are network licenses that allow a number of individual users to access the software on a defined network, including, in some cases, regional or global networks. License fees depend on the type of license, product mix and number of copies of each product licensed.

In many cases, we provide our customers the right to "re-mix" a portion of the software they initially licensed for other specified Synopsys products. For example, a customer may use our front-end design products for a portion of the license term and then exchange such products for back-end placement software for the remainder of the term in order to complete the customer's IC design. This practice helps assure the customer's access to the complete design flow needed to design its product. The customer's re-mix of product, when so provided under the customer agreement, does not alter the timing of recognition of the license fees paid by the customer, which is governed by our revenue recognition policies. The ability to offer this right to customers often gives us an advantage over competitors who offer a narrower range of products, because customers can obtain more of their design flow from a single vendor. At the same time, because in such cases the customer need not obtain a new license and pay an additional license fee for the use of the additional products, the use of these arrangements could result in reduced revenue compared to licensing the individual products separately without re-mix rights.

We currently offer our software products under various license types: renewable TSLs, term licenses and perpetual licenses. For a full discussion of these licenses, see Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates* and *Results of Operations Revenue Background*.

With respect to our DesignWare Core intellectual property products, we typically license those products to our customers under nonexclusive license agreements that provide usage rights for specific applications. Fees under these licenses are typically charged on a per design basis plus, in some cases, royalties.

Finally, our Global Technical Services team providing design consulting services typically operate under consulting agreements with our customers with statements of work specific to each project.

# **Proprietary Rights**

Synopsys primarily relies upon a combination of copyright, patent, trademark and trade secret laws and license and nondisclosure agreements to establish and protect its proprietary rights. We have a diversified portfolio of more than 700 patents issued and more than 400 pending patent applications in

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the United States and in foreign jurisdictions. Our issued patents have expiration dates through 2026. Our patents and pending patent applications primarily relate to our products and the technology used in connection with our products. Our source code is protected both as a trade secret and as an unpublished copyrighted work. However, third parties may develop similar technology independently. In addition, effective copyright and trade secret protection may be unavailable or limited in some foreign countries. We currently hold United States and foreign patents on some of the technologies included in our products and will continue to pursue additional patents in the future. We are not significantly dependent upon any single patent, copyright, trademark or license with respect to our proprietary rights.

In many cases, under our customer agreements and other license agreements, we offer to indemnify our customer if the licensed products infringe on a third party's intellectual property rights. As a result, we are from time to time subject to claims that our products infringe on these third party rights. For example, we are currently defending some of our customers against claims that their use of one of our products infringes on a patent held by a Japanese electronics company. We believe this claim is without merit and will continue to vigorously defend against it.

#### Employees

As of October 31, 2008, Synopsys had 5,691 employees, of which 2,856 were based in the United States.

#### **Acquisitions in Fiscal 2008**

For information about acquisitions we completed during fiscal 2008, please see Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations Overview* and Note 3 of *Notes to Consolidated Financial Statements* which information is included herein.

#### Executive Officers and Additional Members of Management of the Registrant

The executive officers of Synopsys and their ages as of December 12, 2008, were:

Name	Age	Position
Aart J. de Geus	54	Chief Executive Officer and Chairman of the Board of Directors
Chi-Foon Chan	59	President and Chief Operating Officer
Brian M. Beattie	55	Chief Financial Officer
Brian E. Cabrera	43	Vice President, General Counsel and Secretary
Joseph W. Logan	49	Senior Vice President, Worldwide Sales

*Aart J. de Geus* co-founded Synopsys and has served as Chairman of the Board of Directors since February 1998 and Chief Executive Officer since January 1994. Since the inception of Synopsys in December 1986, he has held a variety of positions at Synopsys, including Senior Vice President of Engineering and Senior Vice President of Marketing. Dr. de Geus has served as a Director since 1986, and served as Chairman of the Board from 1986 to 1992 and as President from 1992 to 1998. From 1982 to 1986, Dr. de Geus was employed by General Electric Corporation, where he was the Manager of the Advanced Computer-Aided Engineering Group. Dr. de Geus holds an M.S.E.E. from the Swiss Federal Institute of Technology in Lausanne, Switzerland and a Ph.D. in Electrical Engineering from Southern Methodist University.

*Chi-Foon Chan* has served as Chief Operating Officer since April 1997 and as President and a Director of Synopsys since February 1998. From September 1996 to February 1998, he served as Executive Vice President, Office of the President. From February 1994 until April 1997, he served as

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Senior Vice President, Design Tools Group. In addition, he has held the titles of Vice President of Application Engineering and Services; Vice President, Engineering and General Manager, DesignWare Operations; and Senior Vice President, Worldwide Field Organization. Dr. Chan joined Synopsys in May 1990. From March 1987 to May 1990, Dr. Chan was employed by NEC Electronics, where he was General Manager, Microprocessor Division. From 1977 to 1987, Dr. Chan held a number of senior engineering positions at Intel Corporation. Dr. Chan holds a B.S. in Electrical Engineering from Rutgers University, and an M.S. and a Ph.D. in Computer Engineering from Case Western Reserve University.

*Brian M. Beattie* has served as Chief Financial Officer since January 2006. From October 1999 to January 2006, he was Executive Vice President of Finance and Administration and Chief Financial Officer of SupportSoft, Inc. From May 1998 to May 1999, he served as Vice President of Finance, Mergers and Acquisitions of Nortel Networks Corporation. From July 1996 to April 1998, Mr. Beattie served as Group Vice President of Meridian Solutions of Nortel Networks Corporation. From February 1993 to June 1996, Mr. Beattie served as Vice President of Finance, Enterprise Networks, for Nortel Networks Corporation. Mr. Beattie holds a Bachelor of Commerce and an M.B.A. from Concordia University in Montreal.

*Brian E. Cabrera* has served as Vice President, General Counsel and Secretary since June 2006. From August 1999 to June 2006, he held various positions with Callidus Software, most recently as Senior Vice President, General Counsel and Secretary and prior to 2004 as General Counsel and Vice President of Operations and Human Resources. Prior to Callidus, Mr. Cabrera held senior legal positions at PeopleSoft, Netscape Communications, and Silicon Graphics. Mr. Cabrera holds a Bachelor of Arts in Political Science and Philosophy and a Masters in Public Administration from the University of Southern California, as well as a Juris Doctorate from the University of Southern California Law School.

*Joseph W. Logan* has served as Senior Vice President of Worldwide Sales since September 2006. Previously, he was head of sales for the North America East region from September 2001 to September 2006. Prior to Synopsys, Mr. Logan was head of North American Sales and Support at Avant! Corporation. Mr. Logan holds a B.S.E.E. from the University of Massachusetts, Amherst.

There are no family relationships among any Synopsys executive officers or directors.

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Certain additional members of management of Synopsys and their ages as of December 12, 2008, were:

Name	Age	Position
John Chilton	51	Senior Vice President, Marketing and
		Business Development Group
Janet S. Collinson	48	Senior Vice President, Human
		Resources and Facilities
Antun Domic	57	Senior Vice President and General
		Manager, Implementation Group
Manoj Gandhi	48	Senior Vice President and General
		Manager, Verification Group
Deirdre Hanford	46	Senior Vice President, Global Technical
		Services
Fu-Hwa (Howard) Ko	53	Senior Vice President and General
		Manager, Silicon Engineering Group
Joachim Kunkel	50	Vice President and General Manager,
		Systems and IP Group
Sheng-Chun (Paul) Lo	49	Senior Vice President and General
		Manager, Analog/Mixed Signal Group
Gary Meyers	44	Vice President and General Manager,
		Synplicity Business Group

John Chilton has served as Senior Vice President of the Marketing and Business Development Group since September 2006. Previously, he was Senior Vice President and General Manager of the Solutions Group from August 2003 to September 2006 and Senior Vice President and General Manager of the IP and Design Services Business Unit from 2001 to August 2003. From 1997 to 2001, Mr. Chilton served as Vice President and General Manager of the Design Reuse Business Unit. Mr. Chilton holds a B.S.E.E. from University of California at Los Angeles and an M.S.E.E. from the University of Southern California.

*Janet S. Collinson* has served as Senior Vice President of Human Resources and Facilities since August 2003. Previously, she was Vice President of Real Estate and Facilities from September 1999 to August 2003 and Director of Facilities from January 1997 to September 1999. Ms. Collinson holds a B.S. in Business Administration from California State University, Fresno.

Antun Domic has served as Senior Vice President and General Manager of the Implementation Group since August 2003. Previously, he was Vice President and General Manager of the Nanometer Analysis and Test Group from 1999 to August 2003. Dr. Domic joined Synopsys in April 1997, having previously worked at Cadence Design Systems and Digital Equipment Corporation. Dr. Domic holds a B.S. in Mathematics and Electrical Engineering from the University of Chile in Santiago, Chile, and a Ph.D. in Mathematics from the Massachusetts Institute of Technology.

*Manoj Gandhi* has served as Senior Vice President and General Manager of the Verification Group since August 2000. Previously, he was Vice President and General Manager of the Verification Tools Group from July 1999 to August 2000 and Vice President of Engineering from December 1997 until July 1999. Mr. Gandhi holds a B. Tech. in Computer Science and Engineering from the Indian Institute of Technology, Kharagpur and an M.S. in Computer Science from the University of Massachusetts, Amherst.

*Deirdre Hanford* has served as Senior Vice President of Global Technical Services since September 2006. Previously, she was Senior Vice President of Worldwide Applications Services from December 2002 to September 2006 and Senior Vice President of Business and Market Development from

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September 1999 to December 2002. Prior to that, Ms. Hanford served as Vice President of Sales for Professional Services from October 1998 to September 1999 and as Vice President of Corporate Applications Engineering from April 1996 to September 1999. Ms. Hanford is a member of the national board of directors and immediate past chairperson of the American Electronics Association. Ms. Hanford holds a B.S.E.E. from Brown University and an M.S.E.E. from University of California at Berkeley.

*Fu-Hwa (Howard) Ko* has served as Senior Vice President and General Manager of the Silicon Engineering Group since May 2008. From June 2002 to May 2008, he served as Vice President, Asia Pacific Sales. In June 2002, Dr. Ko joined Synopsys with our acquisition of Avant! Corporation, where he had served as executive operating officer from July 2001 to June 2002. Previously, he was general manager of Avant!'s mixed technology division and head of the system product line. Dr. Ko has also held vice president and other senior management roles at Analogy, Inc. and Mentor Graphics Corporation. Dr. Ko holds a B.S. in Electrical Engineering from the National Taiwan University and a Ph.D. in Electrical Engineering and Computer Science from the University of California at Berkeley.

*Joachim Kunkel* has served as the Vice President and General Manager of the Solutions Group of Synopsys since September 2006. Previously, he served in a number of senior positions at Synopsys, including Vice President of Engineering of the Solutions Group from August 2003 to September 2006, Vice President of Marketing of the IP and Design Services Business Unit from May 2002 to August 2003, and Vice President and General Manager of the System-Level Design Business Unit from October 1998 to May 2002. Mr. Kunkel holds an M.S. in Electrical Engineering from the Aachen University of Technology.

*Sheng-Chun (Paul) Lo* has served as Senior Vice President and General Manager of the Analog/Mixed Signal Group since September 2006. Previously, he was Vice President of Engineering of the Implementation Group from November 2002 to September 2006 and Senior Vice President of International Strategy from June 2002 to November 2002. In June 2002, Dr. Lo joined Synopsys with our acquisition of Avant! Corporation, where he had served as President from July 2001 to June 2002 and had held a variety of positions, including Chief Operating Officer, Head of Engineering, Head of Asia Engineering and key Architect in product development. Dr. Lo has also held positions at Cadence Design Systems, Quickturn Design Systems, and Hughes Aircraft Microelectronics Center. Dr. Lo holds a B.S.E.E. from the National Taiwan University and an M.S. and a Ph.D. in Electrical Engineering from the University of Southern California.

*Gary Meyers* has served as Vice President and General Manager of the Synplicity Business Group since May 2008. Mr. Meyers joined Synopsys with our acquisition of Synplicity, Inc., where he served as President and Chief Executive Officer since October 2004. Mr. Meyers joined Synplicity in January 1998 and served as its President and Chief Operating Officer from August 2004 to October 2004 and as its Vice President, Worldwide Sales from November 1999 to October 2004. He has also held senior sales and marketing management roles at LSI Logic Corp. Mr. Meyers currently serves on the Board of Directors of Exar Corporation, and holds a B.S.E.E from the University of Maryland and an M.B.A. from the University of California at Los Angeles.

During fiscal 2008, each of the above-named additional members of management was also an "officer" as defined in Rule 16a-1(f) promulgated under Section 16 of the Securities Exchange Act of 1934, as amended.

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# Item 1A. Risk Factors

We describe our business risk factors below.

The current severe downturn and uncertainty in the global economy in general and weakness in the semiconductor and electronics industries in particular may harm our business and operating results.

The worldwide economy is currently undergoing unprecedented turmoil amid stock market volatility, tightening of credit markets, concerns of inflation and deflation, decreased consumer confidence, reduced corporate profits and capital spending, adverse business conditions and liquidity concerns and business insolvencies. This turmoil and the uncertainty about future economic conditions could negatively impact our customers and, among other things, postpone their decision-making, decrease their spending and jeopardize or delay their ability or willingness to make payment obligations, any of which could adversely affect our business. Uncertainty about current global economic conditions could also cause volatility of our stock price. We cannot predict the timing, strength or duration of this severe global economic downturn or subsequent recovery.

In addition, the semiconductor and electronics industries are cyclical in nature and are currently experiencing a severe downturn. The EDA industry has been adversely affected by many factors, including the current global downturn, ongoing efforts by semiconductor and electronics companies to reduce their spending, uncertainty regarding their long-term growth rate and underlying financial health, excess EDA tool capacity and increased competition. These factors could, among other things, limit our ability to maintain or increase our sales or recognize revenue from committed contracts and in turn adversely affect our business, operating results and financial condition.

If the general economy and the semiconductor and electronics industries do not improve, our business, financial condition and results of operations could be harmed.

#### Customer payment defaults or related issues could harm our operating results.

The majority of our backlog consists of customer payment obligations not yet due that are attributable to software we have already delivered. A significant portion of revenue we recognize in any period comes from backlog and is dependent upon our receipt of cash. Although customer payment obligations are not cancelable, we will not achieve expected revenue and cash flow if customers default, declare bankruptcy, or otherwise fail to pay amounts owed. Moreover, existing customers may seek to renegotiate pre-existing contractual commitments due to adverse changes in their own businesses. Though we have not, to date, experienced a material level of defaults or renegotiation requests, if the current economic downturn is prolonged, our customers' financial condition and in turn their ability or willingness to fulfill their contractual and financial obligations could be adversely affected. If payment defaults by our customers significantly increase or we experience significant reductions in existing contractual commitments, our operating results would be harmed.

#### If we do not successfully compete in the EDA industry our business and financial condition will be harmed.

We compete with EDA vendors that offer varying ranges of products and services, primarily Cadence Design Systems, Inc., Mentor Graphics Corporation and Magma Design Automation, Inc. We also compete with other EDA vendors, including continual new entrants to the marketplace, that offer products focused on one or more discrete phases of the IC design process, as well as with customers' internally developed design tools and capabilities. We compete principally on technology leadership, product quality and features (including ease-of-use), license terms, post contract customer support, interoperability with our own and other vendors' products, price and payment terms. Specifically, we believe the following competitive factors affect our success:

Technology in the EDA industry evolves rapidly and in order to be successful we must maintain technology leadership. Accordingly, we must successfully anticipate and lead critical

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developments, innovate rapidly and efficiently, improve our existing products, and successfully develop or acquire new products.

We believe that in order to be successful we must offer products that provide both a high level of integration into a comprehensive platform and a high level of individual product performance. We have invested significant resources into the development of our Galaxy Design Platform, integration of our Discovery Verification Platform and enhancement of our SystemVerilog and other advanced features and development of our Manufacturing Solutions and our IP and systems portfolios. Customers may not find these tool and IP configurations more attractive than our competitors' offerings and our efforts to balance the interests of integration versus individual product performance may not be successful.

Some EDA vendors are increasingly offering discounts, which could be significant, as price continues to be a competitive consideration for our customers. If we do not match or are unable to match a competitor's pricing for a particular solution or if we are unable to otherwise enhance the value of our offering, we may lose business, which would result in lost revenue and could harm our operating results, particularly if the customer chooses to consolidate all or a substantial portion of their other EDA purchases with the competitor.

We believe that in order to compete effectively, we need to enhance the value of our offering by providing additional rights such as multiple copies of the tools, post-contract customer support, expanded license usage related to duration, location and quantity, contractor and site access, future purchase rights and the ability to purchase pools of technology. If we do not match or are unable to match a competitor's offering, we may lose business, which would result in lost revenue and could harm our operating results.

Payment terms are aggressively negotiated by our customers and affect our competitive position. Payment terms on time-based licenses have generally lengthened over time. Longer payment terms could continue in the future, which could negatively affect our future revenue and operating cash flow.

The EDA industry is subject to continual consolidation. We and our competitors have historically acquired businesses and technologies to complement and expand our respective product offerings. If any of our competitors consolidate or acquire businesses and technologies which we do not offer they may be able to exert even greater competitive pressure by offering a more complete or larger technology portfolio, a larger support and service capability, or lower prices.

Despite the complexity of the EDA market, entry and expansion into the EDA market by new and existing companies can and does occur, and could make it more difficult to compete successfully.

In addition, new competitive factors may emerge from time to time. If we fail to successfully compete as described above or fail to address new competitive forces our business will be harmed.

Lack of growth in new IC design starts, industry consolidation and other potentially long-term trends may adversely affect the EDA industry, including demand for our products and services.

The increasing complexities of SoCs and ICs, and customers' concerns about managing costs and risks have also led to the following potentially long-term negative trends in our industry:

The number of IC design starts has remained flat during the last several years. New IC design starts are one of the key drivers of demand for EDA software.

A number of mergers in the semiconductor and electronics industries have occurred and more are likely. Mergers can reduce the aggregate level of purchases of EDA software and services,

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and in some cases, increase customers' bargaining power in negotiations with their suppliers, including Synopsys.

Due to factors such as increased globalization, cost controls among customers appear to have become more permanent, adversely impacting our customers' EDA spending.

Industry changes, plus the cost and complexity of IC design, may be leading some companies in these industries to limit their design activity in general, to focus only on one discrete phase of the design process while outsourcing other aspects of the design.

All of these trends, if sustained, could harm the EDA industry, including the demand for our products and services, which in turn would harm our financial condition and results of operations.

Changes in, or interpretations of, accounting principles could result in unfavorable accounting charges or effects, including changes to our prior financial statements, which could cause our stock price to decline.

We prepare our consolidated financial statements in conformity with U.S. generally accepted accounting principles. These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. A change in these principles, or in our interpretations of these principles, can have a significant effect on our reported results and may retroactively affect previously reported results.

We have received a Revenue Agent's Report from the Internal Revenue Service claiming a significant increase in our U.S. taxable income. An adverse outcome could have an adverse effect on our results of operations and financial condition.

On July 11, 2008, we received a Revenue Agent's Report in which the Internal Revenue Service, or IRS, proposed an adjustment that would result in an aggregate tax deficiency for fiscal 2002 through 2004 of approximately \$236.2 million, \$130.5 million of which would be a reduction of certain tax credits that would otherwise be available either as refund claims or to offset taxes due in future periods. In August 2008, we filed a protest to the proposed deficiency with the IRS, which will cause the matter to be referred to the Appeals Office of the IRS. An adverse outcome of this matter could result in significant tax expense and harm our results of operations and financial condition.

Unfavorable tax law changes, an unfavorable government review of our tax returns or changes in our geographical earnings mix or forecasts of foreign source income could adversely affect our effective tax rate and our operating results.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions. A change in the tax law in the jurisdictions in which we do business, including an increase in tax rates or an adverse change in the treatment of an item of income or expense, could result in a material increase in our tax expense.

Our tax filings are subject to review or audit by the IRS and state, local and foreign taxing authorities. We exercise judgment in determining our worldwide provision for income taxes and, in the ordinary course of our business, there may be transactions and calculations where the ultimate tax determination is uncertain. The IRS examinations of our federal tax returns for the years 2000-2001 and 2002-2004 resulted in significant proposed adjustments. Although we believe our tax estimates are reasonable, we can provide no assurance that any final determination in an audit will not be materially different than the treatment reflected in our historical income tax provisions and accruals. An assessment of additional taxes as a result of an audit could adversely affect our income tax provision and net income in the period or periods for which that determination is made.

We have operations both in the United States and in multiple foreign jurisdictions with a wide range of statutory tax rates. Certain foreign operations are subject to temporary favorable foreign tax rates. Therefore, any changes in our geographical earning mix in various tax jurisdictions, including

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those resulting from transfer pricing adjustments and expiration of or amendments to foreign tax rulings, could materially increase our effective tax rate. Furthermore, we maintain deferred tax assets related to federal foreign tax credits and our ability to use these credits is dependent upon having sufficient future foreign source income in the United States. Changes in our forecasts of such future foreign source income could result in an adjustment to the deferred tax asset and a related charge to earnings which could materially affect our financial results.

Our revenue and earnings fluctuate and if our financial results fail to meet stockholder expectations our stock price could decline.

Many factors affect our revenue and earnings, including customer demand, license mix, the timing of revenue recognition on products and services sold, causing our revenue and earnings results to fluctuate. Accordingly, stockholders should not view our historical results as necessarily indicative of our future performance.

From time to time, we provide targets related to our future financial performance. In addition, financial analysts publish their own expectations of our future financial performance. Because our quarterly revenue and our operating results fluctuate, future financial performance is difficult to predict. Downward adjustments of our targets or the failure to meet our targets or the expectations of research analysts could cause the market price of our common stock to decline.

Some of the specific factors that could affect our revenue and earnings in a particular quarter or over several fiscal periods include, but are not limited to:

The market for EDA products is dynamic and depends on a number of factors including consumer demand for our customers' products, customer research and development and EDA budgets, pricing, our competitors' product offerings and customer design starts. It is difficult to predict in advance the effect of these and other factors on our customers' demand for our products on a medium or long term basis. As a result, actual future customer purchases could differ materially from our forecasts which, in turn, could cause our actual revenue to be materially different than our publicly disclosed targets.

We base our operating expenses in part on our expectations for future revenue and generally must commit to expense levels in advance of revenue being recognized. Since only a small portion of our expenses varies with revenue, any revenue shortfall typically causes a direct reduction in net income.

Our revenue and earnings targets over a number of fiscal periods assume a certain level of orders and a certain mix between upfront and time-based license revenue. The amount of orders received and changes in the mix due to factors such as the level of overall license orders, customer demand, customer payment terms and ship dates could result in lower revenue and harm our operating results. For example, if we ship more licenses generating upfront revenue than expected during any given fiscal period, our revenue and earnings for that period could be above our targets even if orders are below target; conversely, if we ship fewer licenses generating upfront revenue than expected, our revenue and earnings for that period could fall below our targets even if orders meet or even exceed our target. Similarly, if we receive a lower-than-expected level of license orders generating time-based revenue during a given period, our revenue in future periods could be negatively affected.

We may be required to implement a number of cost control measures in order to meet our externally-communicated financial targets, any of which could fail to result in the anticipated cost savings or could harm our business.

We often amend our contracts with our customers to extend the term or add new products. Although these amendments can provide a longer-term payment stream from the customers,

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they can also result in a lower amount of revenue being recognized per year than under the original arrangement even if the total value of the extended contract is larger.

Certain of our license agreements provide customers the right to re-mix a portion of the software initially subject to the license for other specified Synopsys products. While this practice helps assure the customer's access to the complete design flow needed to manufacture its product, use of these arrangements could result in reduced revenue compared to licensing the individual tools separately.

In the past, we have regularly received a significant portion of our orders for a given quarter in the last one or two weeks of the quarter. The delay of one or more orders, particularly an order generating upfront revenue, could cause us to have lower revenue and/or earnings for that quarter.

A large portion of our revenue is derived from a relatively small number of customers. While our agreements with such customers are binding multi-year agreements, if we were to lose these customers or if they did not renew their agreements with us, over time our financial results could be adversely affected.

We make significant judgments relating to revenue recognition, specifically determining the existence of proper documentation, establishing that the fee is fixed or determinable, verifying delivery of our products and services and assessing the creditworthiness of our customers. While we believe our judgments in these areas are reasonable, there can be no assurance that such judgments will not be challenged in the future. In such an event, we could be required to reduce the amount of revenue we have recognized in prior periods, which would have an adverse impact on our reported results of operations for those periods.

Our customers spend a great deal of time reviewing and testing our products, either alone or against competing products, before making a purchase decision. Accordingly, our customers' evaluation and purchase cycles may not match our fiscal quarters. Further, sales of our products and services may be delayed if customers delay project approvals or starts because of budgetary constraints or their budget cycles.

The sales cycle for our products is lengthy. The purchase of our products generally involves a significant commitment of capital and other resources by a customer. This commitment often requires significant technical review, assessment of competitive products and approval at a number of management levels within a customer's organization. While our customers are evaluating our products and services, we may incur substantial sales and marketing expenses and spend significant management effort to complete these sales. Any delay in completing sales in a particular quarter or the failure to complete a sale after expending resources during the sales cycle could cause our operating results to suffer.

We rely on third party subcontractors to manufacture our hardware products. Our reliance on third parties subjects us to risks such as reduced control over delivery schedules and quality, a potential lack of adequate capacity during periods when demand is high and potential increases in product costs due to factors outside our control such as capacity shortages and pricing changes. Our outsourcing model could lead to delays in product deliveries, lost sales and increased costs which could harm our relationships with our customers resulting in lower operating results.

The failure to meet the semiconductor industry's demands for advancing EDA technology and continued cost reductions may harm our financial results.

SoC and IC functionality continues to increase while feature widths decrease, substantially increasing the complexity, cost and risk of IC design and manufacturing. To address greater complexity,

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semiconductor designers and manufacturers demand continuous innovation from EDA suppliers. At the same time, as a general business trend, we believe some customers and potential customers are seeking to buy more products from fewer suppliers and at reduced overall prices in an effort to reduce overall cost and risk. In order to succeed in this environment, we must successfully meet our customers' technology requirements and increase the value of our products, while also striving to reduce their overall costs and our own operating costs. If we fail to successfully manage these conflicting demands our financial condition and results of operations will be harmed.

We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results.

If new competitors, technological advances by existing competitors, our entry into new markets, or other competitive factors require us to invest significantly greater resources than anticipated in our research and development efforts, our operating expenses would increase. If we are required to invest significantly greater resources than anticipated in research and development efforts without a corresponding increase in revenue, our operating results could decline. Research and development expenses are likely to fluctuate from time to time to the extent we make periodic incremental investments in research and development and these investments may be independent of our level of revenue which could negatively impact our financial results. In order to remain competitive, we anticipate that we will continue to devote substantial resources to research and development.

We may not be able acquire businesses or technology and we may not be able to realize the potential financial or strategic benefits of the business acquisitions or strategic investments we complete, which could hurt our ability to grow our business, develop new products or sell our products.

We have acquired a number of companies or their assets in the past and expect to make additional acquisitions of businesses or technology in the future. We may not find suitable acquisition targets or we may not be able to consummate desired acquisitions due to unfavorable credit markets or other risks, which could harm our operating results. We have acquired a number of companies and technologies in recent years, including Synplicity, Inc. in May 2008. In addition to direct costs, acquisitions pose a number of risks, including:

Potential negative impact on our earnings per share;

Failure of acquired products to achieve projected sales;

Problems in integrating the acquired products with our products;

Difficulties in retaining key employees and integrating them into Synopsys;

Failure to realize expected synergies or cost savings;

Regulatory delays;

Drain on management time for acquisition-related activities;

Assumption of unknown liabilities, including tax, and unanticipated costs;

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Diversion of resources and unanticipated expenses resulting from litigation arising from potential or actual business acquisitions or investments; and

Adverse effects on customer buying patterns or relationships.

While we review proposed acquisitions carefully and strive to negotiate terms that are favorable to us, an acquisition may not positively affect our future performance. If we later determine we cannot use or sell an acquired product or technology, we will be required to write down intangible assets associated with the product or technology which would harm our operating results.

Conditions of foreign economies, foreign exchange rate fluctuations and the increasingly global nature of our operations could adversely affect our performance.

During fiscal 2008, 2007 and 2006, we derived approximately 50% of our revenue from outside the United States. We expect our overall orders and revenue targets will continue to depend on substantial contributions from customers outside the United States. Foreign sales are vulnerable to regional or worldwide economic, political and health conditions, including the effects of international political conflict, hostilities and natural disasters. Further, any deterioration of foreign economies or foreign currency exchange rates would adversely affect our performance by reducing the amount of revenue derived from outside the United States.

Our operating results are also affected by fluctuations in foreign currency exchange rates. Our results of operations can be adversely affected when the U.S. dollar weakens relative to other currencies, including the Euro, the Japanese yen and the Canadian dollar, as a result of the conversion of expenses of our foreign operations denominated in foreign currencies into the dollar. Exchange rates are subject to significant and rapid fluctuations, and therefore we cannot predict the prospective impact of exchange rate fluctuations on our business, results of operations and financial condition. While we hedge most foreign currency exposures of our business, we are unable to hedge all of our currency exposures, and our hedging activities may not completely mitigate our foreign currency risks.

In addition, we have expanded our non-U.S. operations significantly in the past several years. While the increased international presence of our business creates the potential for cost reductions and higher international sales, this strategy also requires us to recruit and retain qualified technical and managerial employees, manage multiple, remote locations performing complex software development projects and ensure intellectual property protection outside of the United States. If we fail to effectively manage our global operations our business and results of operations will be harmed.

Our operations and sales to customers internationally subject us to a number of additional risks, including:

international economic and political conditions, such as political tensions between countries in which we do business;

unexpected changes in, or impositions of, legislative or regulatory requirements;

difficulties in complying with a variety of foreign laws and regulatory requirements;

differing legal standards with respect to protection of intellectual property and employment practices;

our inability to adapt to cultural differences in the conduct of business;

inadequate local infrastructure that could result in business disruptions;

exporting or importing issues related to export or import restrictions, tariffs, quotas and other trade barriers and restrictions;

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financial risks such as longer payment cycles, difficulty in collecting accounts receivable and fluctuations in currency exchange rates;

imposition of additional taxes and penalties; and

other factors beyond our control such as terrorism, civil unrest, war and infectious diseases.

#### Our investment portfolio may be impaired by further deterioration of the capital markets.

Our cash equivalent and short-term investment portfolio as of October 31, 2008 consists of investment grade municipal bonds, tax-exempt money market mutual funds and taxable money market mutual funds. We follow an established investment policy and set of guidelines to monitor, manage and limit our exposure to interest rate and credit risk. The policy sets forth credit quality standards and limits our exposure to any one issuer. As a result of current adverse financial market conditions, some financial instruments, such as structured investment vehicles, sub-prime mortgage-backed securities and collateralized debt obligations, may pose risks arising from liquidity and credit concerns. As of October 31, 2008, we had no direct holdings in these categories of investments and our exposure to these financial instruments through our indirect holdings in money market mutual funds was close to 0% of total cash, cash equivalents and short-term investment portfolio. However, we cannot predict future market conditions or market liquidity and our investment portfolio may suffer other than temporary impairments in future periods.

We account for our investment instruments in accordance with Statement of Financial Accounting Standards No. 115, or SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities.* All of our cash equivalents and marketable securities are treated as "available-for-sale" under SFAS No. 115. Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate debt securities may have their market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates or if the decline in fair value of our publicly traded debt or equity investments is judged to be other-than-temporary. We may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in interest rates. However, because any debt securities we hold are classified as "available-for-sale," no gains or losses are realized in our consolidated statements of income due to changes in interest rates unless such securities are sold prior to maturity or unless declines in value are determined to be other-than-temporary. These securities are reported at fair value with the related unrealized gains and losses included in accumulated other comprehensive income, a component of stockholders' equity, net of tax.

#### From time to time we are subject to claims that our products infringe on third party intellectual property rights.

Under our customer agreements and other license agreements, we agree in many cases to indemnify our customers if our products infringe a third party's intellectual property rights. As a result, we are from time to time subject to claims that our products infringe on these third party rights. We are currently defending some of our customers against claims that their use of one of our products infringes on a patent held by a Japanese electronics company. We believe this claim is without merit and will continue to vigorously defend against it.

These types of claims can, however, result in costly and time-consuming litigation, require us to enter into royalty arrangements, subject us to damages or injunctions restricting our sale of products, invalidate a patent or family of patents, require us to refund license fees to our customers or to forgo future payments or require us to redesign certain of our products, any one of which could harm our business and operating results.

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If we fail to protect our proprietary technology our business will be harmed.

Our success depends in part upon protecting our proprietary technology. We rely on agreements with customers, employees and others and on intellectual property laws worldwide to protect our proprietary technology. These agreements may be breached, and we may not have adequate remedies for any breach and our trade secrets may otherwise become known or be independently developed by competitors. Moreover, some foreign countries do not currently provide effective legal protection for intellectual property and our ability to prevent the unauthorized use of our products in those countries is therefore limited. We aggressively pursue action against companies or individuals that wrongfully appropriate or use our products and technologies. We engaged in anti-piracy efforts against certain companies located in China; but these actions may not be successful. We may need to commence litigation or other legal proceedings in order to:

assert claims of infringement of our intellectual property;

protect our trade secrets or know-how; or

determine the enforceability, scope and validity of the propriety rights of others.

If we do not obtain or maintain appropriate patent, copyright or trade secret protection, for any reason, or cannot fully defend our intellectual property rights in some jurisdictions, our business and operating results would be harmed. In addition, intellectual property litigation is lengthy, expensive and uncertain and legal fees related to such litigation will increase our operating expenses and may reduce our net income.

Our business is subject to evolving corporate governance and public disclosure regulations that have increased both our costs and the risk of noncompliance, which could have an adverse effect on our stock price.

We are subject to rules and regulations promulgated by a number of governmental and self-regulated organizations, including the SEC, NASDAQ and the Public Company Accounting Oversight Board. Many of these regulations continue to evolve, making compliance more difficult and uncertain. In addition, our efforts to comply with these new regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

In particular, Section 404 of Sarbanes-Oxley Act of 2002 and related regulations require us to include a management assessment of our internal control over financial reporting and our auditors to render an opinion as to the effectiveness of our internal control over financial reporting in our annual reports. This effort has required, and will continue to require in the future, the commitment of significant financial and managerial resources. Any failure to complete a favorable assessment and obtain an unqualified opinion from our independent registered public accounting firm could cause our stock price to decline.

#### There are inherent limitations on the effectiveness of our controls.

We do not expect that our disclosure controls or control system will prevent all error and all fraud. Regardless of how well designed and operated it is, a control system can provide only reasonable assurance that its objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Failure of our control systems to prevent error or fraud could materially adversely impact us.

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#### If we fail to timely recruit and retain key employees our business be harmed.

To be successful, we must attract and retain key technical, sales and managerial employees, including those who join Synopsys in connection with acquisitions. There are a limited number of qualified EDA and IC design engineers, and competition for these individuals is intense. Our employees are often recruited aggressively by our competitors and our customers. Any failure to recruit and retain key technical, sales and managerial employees would harm our business, results of operations and financial condition.

We issue stock options and restricted stock units and maintain employee stock purchase plans as a key component of our overall compensation. We face pressure from stockholders, who must approve any increases in our equity pool, to limit the use of such equity based compensation and its dilutive effect on stockholders. In addition, we are required under U.S. GAAP to recognize compensation expense in our results from operations for employee equity grants and our employee stock purchase plan which has increased the pressure to limit equity-based compensation. These factors may make it more difficult for us to grant attractive equity-based packages in the future, which could adversely impact and limit our ability to attract and retain key employees.

## Product errors or defects could expose us to liability and harm reputation and we could lose market share.

Despite extensive testing prior to releasing our products, software products frequently contain errors or defects, especially when first introduced, when new versions are released or when integrated with technologies developed by acquired companies. Product errors could affect the performance or interoperability of our products, could delay the development or release of new products or new versions of products and could adversely affect market acceptance or perception of our products. In addition, allegations of IC manufacturability issues resulting from use of our IP products could, even if untrue, adversely affect our reputation and our customers' willingness to license IP products from us. Any such errors or delays in releasing new products or new versions of products or allegations of unsatisfactory performance could cause us to lose customers, increase our service costs, subject us to liability for damages and divert our resources from other tasks, any one of which could materially and adversely affect our business and operating results.

#### Catastrophic events may disrupt our business and harm our operating results.

We rely on our network infrastructure and enterprise applications, and technology systems for our development, marketing, operational, support and sales activities. A disruption or failure of these systems in the event of a major earthquake, fire, telecommunications failure, cyber-attack, terrorist attack, or other catastrophic event could cause system interruptions, delays in our product development and loss of critical data and could prevent us from fulfilling our customers' orders. Our corporate headquarters, a significant portion of our research and development activities, our data centers, and certain other critical business operations are located in California, near major earthquake faults. We believe we have developed sufficient disaster recovery plans and backup systems to reduce the potentially adverse effect of such events, but a catastrophic event that results in the destruction or disruption of any of our data centers or our critical business or information technology systems would severely affect our ability to conduct normal business operations and, as a result, our operating results would be adversely affected.

#### Item 1B. Unresolved Staff Comments

None.

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# Item 2. Properties

#### **United States Facilities**

Our principal offices are located in four adjacent buildings in Mountain View, California, which together provide approximately 400,000 square feet of available space. This space is leased through February 2015. We occupy approximately 200,000 square feet of space in two adjacent buildings in Sunnyvale, California under lease through October 2012, approximately 72,000 square feet of space in a third building in Sunnyvale under lease through April 2012, and approximately 66,000 square feet in a fourth building in Sunnyvale under lease through February 2013. We use these buildings for administrative, marketing, research and development, sales and support activities. In addition, we lease approximately 80,000 square feet of space in Marlboro, Massachusetts for sales and support, research and development and customer education activities. Beginning in January 2009, we will be extending the lease on this property until October 2014 but reducing the amount of space leased to approximately 56,000 square feet. We currently lease 18 other offices throughout the United States, primarily for sales and support activities.

We own two buildings totaling approximately 230,000 square feet on approximately 43 acres of land in Hillsboro, Oregon, one of which is currently vacant. The other is used for administrative, marketing, research and development and support activities.

We own a third building in Sunnyvale, California with approximately 120,000 square feet, which is leased to a third party through April 2009. We also own 13 acres of undeveloped land in Marlboro, Massachusetts.

#### **International Facilities**

We lease approximately 45,000 square feet in Dublin, Ireland for our foreign headquarters and for research and development purposes. In addition, we lease foreign sales and service offices in Canada, Denmark, Finland, France, Germany, Hong Kong, Hungary India, Israel, Italy, Japan, the Netherlands, the People's Republic of China, Singapore, South Korea, Sweden, Taiwan, the United Arab Emirates and the United Kingdom. We also lease research and development facilities in Armenia, Canada, Chile, France, Germany, India, Japan, the Netherlands, the People's Republic of China, Switzerland, Taiwan, Turkey and the United Kingdom.

As a result of acquisitions, we have assumed leases in a number of foreign and domestic locations. Following each acquisition, where feasible, we consolidate the acquired company's employees and operations into our existing local sites. In such cases, we generally seek to sublease the assumed space or negotiate with the landlord to terminate the underlying lease.

We believe our properties are adequately maintained and suitable for their intended use and that our facilities have adequate capacity for our current needs.

## Item 3. Legal Proceedings

*IRS Examinations.* See *IRS Examinations* in Note 9 of *Notes to Consolidated Financial Statements* for further information regarding IRS examinations.

*Other Proceedings.* We are also subject to other routine legal proceedings, as well as demands, claims and threatened litigation, that arise in the normal course of our business. The ultimate outcome of any litigation is uncertain and unfavorable outcomes could have a negative impact on our results of operations and financial condition. Regardless of outcome, litigation can have an adverse impact on Synopsys because of the defense costs, diversion of management resources and other factors.

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

No matters were submitted to a vote of security holders during the fourth quarter of fiscal 2008.

# PART II

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

# **Common Stock Market Price**

Our common stock trades on the Nasdaq Global Select Market under the symbol "SNPS." The following table sets forth for the periods indicated the high and low sale prices of our common stock, as reported by the Nasdaq Global Select Market.

		Quarter Ended			
	January 31,	January 31, April 30, July 31, Octobe			
2008:		-			
High	\$ 27.98	\$ 24.82	\$26.61	\$	24.99
Low	\$ 21.61	\$ 21.13	\$23.16	\$	15.22
2007:					
High	\$ 27.49	\$ 28.27	\$28.67	\$	29.11
Low	\$ 21.84	\$ 24.02	\$23.60	\$	22.01

As of October 31, 2008, we had approximately 456 stockholders of record. To date, we have paid no cash dividends on our capital stock and have no current intention to do so. Our credit facility contains financial covenants requiring us to maintain certain specified levels of cash and cash equivalents. Such provisions could have the effect of preventing us from paying dividends in the future.

## **Stock Repurchase Program**

The table below sets forth information regarding repurchases of Synopsys' common stock by Synopsys during the three months ended October 31, 2008.

Period(1)	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced programs	Maximum dollar value of shares that may yet be purchased under the programs
Month #1	-	-	• •	
August 3, 2008 through September 6, 2008		\$		\$259,721,283
Month #2				
September 7, 2008 through October 4,				
2008	2,444,264	\$20.4563	2,444,264	\$209,720,710
Month #3				
October 5, 2008 through November 1, 2008		\$		\$209,720,710
Total	2,444,264	\$20.4563	2,444,264	\$209,720,710

(1)

All months shown are Synopsys' fiscal months.

All shares were purchased pursuant to a \$500.0 million stock repurchase program approved by Synopsys' Board of Directors and announced on December 1, 2004 which was replenished to \$500.0 million on March 22, 2007 and announced on March 27, 2007. Funds are available until expended or until the program is suspended by the Chief Financial Officer or the Board of Directors.

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# Performance graph

The following graph compares the 5-year total return to stockholders of our common stock relative to the cumulative total returns of the S&P 500 Index and the S&P Information Technology Index. This year's graph also includes the return of the NASDAQ Composite Index. Synopsys believes that because our common stock is traded on the NASDAQ Global Select Market of the NASDAQ Stock Market, the NASDAQ Composite Index is a useful broad equity market index against which to compare the performance of our common stock. Synopsys intends to use the NASDAQ Composite Index as a comparative index going forward. The graph assumes that \$100 was invested on October 31, 2003 in us and in each of the indexes and that all dividends were reinvested. No cash dividends were declared on our common stock during such time. The comparisons in the table are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of our common stock.

## **COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among Synopsys, Inc, The S&P 500 Index, The S&P Information Technology Index and The NASDAQ Composite Index

<sup>\*\$100</sup> invested on 10/31/03 in stock and index-including reinvestment of dividends. Fiscal year ending October 31.

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The information presented above in the stock performance graph shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C, except to the extent that we subsequently specifically request that such information be treated as soliciting material or specifically incorporate it by reference into a filing under the Securities Act of 1933 or Securities Exchange Act of 1934.

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# Item 6. Selected Financial Data

	Fiscal Year Ended October 31,(1)(2)				
	2008	2007	2006	2005	2004
	(in thousands, except per share data)				
Revenue	\$1,336,951	\$1,212,469	\$1,095,560	\$ 991,931	\$1,092,104
Income (loss) before provisions for					
income taxes(3)	218,956	165,799	43,719	(7,789)	91,592
Provision for income taxes(4)	28,978	35,308	18,977	9,325	16,508
Net income (loss)	189,978	130,491	24,742	(17,114)	75,084
Net income (loss) per share :					
Basic	1.33	0.91	0.17	(0.12)	0.49
Diluted	1.29	0.87	0.17	(0.12)	0.47
Working capital	413,307	296,463	23,394	130,552	169,904
Total assets	2,742,478	2,617,337	2,157,822	2,133,424	2,087,567
Stockholders' equity(5)	1,528,371	1,436,393	1,163,167	1,210,637	1,258,455

(1)

Synopsys has a fiscal year that ends on the Saturday nearest October 31. Fiscal 2007 was a 53-week fiscal year. Fiscal 2008, 2006, 2005, and 2004 were 52-week years. Fiscal 2009 will be a 52-week fiscal year.

#### (2)

Includes results of operations from acquired businesses from the date of acquisition which information is included herein. See Note 3 of *Notes to Consolidated Financial Statements*.

(3)

Includes a \$12.5 million litigation settlement award received from Magma Design Automation, Inc. (Magma) during fiscal 2007. See Note 10 of *Notes to Consolidated Financial Statements*.

(4)

Includes a \$17.3 million one time tax benefit from an IRS settlement received in fiscal 2008. See Note 9 of *Notes to Consolidated Financial Statements*.

(5)

Includes a \$14.9 million adjustment to the beginning balance of fiscal 2007 retained earnings as a result of the adoption of Staff Accounting Bulletin No. 108 (SAB 108) and a \$5.0 million adjustment to the beginning balance of fiscal 2008 retained earnings as a result of the adoption of FASB Interpretation No. 48 Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109 (FIN 48). See Note 9 of Notes to Consolidated Financial Statements.

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

## Overview

The following summary of our financial condition and results of operations is qualified in its entirety by the more complete discussion contained in this Item 7 and by the risk factors set forth in Item 1A of this Annual Report. Please also see the cautionary language at the beginning of Part 1 of this Annual Report regarding forward-looking statements.

#### Business Environment Summary

We generate substantially all of our revenue from customers in the semiconductor and electronics industries. Our customers typically fund purchases of our software and services largely out of their research and development (R&D) budgets and, to a lesser extent, their manufacturing and capital budgets. As a result, our customers' business outlook and willingness to invest in new and increasingly complex chip designs affect their spending decisions and vendor selections.

Over the past several years, customers have increasingly faced competing challenges of technological complexity and cost pressures. Many electronics companies have refined their business strategies by focusing on their areas of differentiation and in some cases exiting non-differentiating areas. For example, some have outsourced semiconductor manufacturing to a third party foundry or manufacturing consortium. These challenges have varying impacts on members of the Electronic Design Automation (EDA) industry in which we operate. The EDA industry is very competitive. While the importance of offering a broad, integrated portfolio of solutions, along with sizeable, global support, continues to grow, no one factor drives an EDA customer's buying decision and we compete on all fronts to capture a higher portion of our customers' budget. Our customer arrangements are complex, involving hundreds of products and various license rights.

Many of our customers are large businesses, purchasing substantially all of the capabilities our products offer. Our customers are increasingly focused on reducing their overall costs by demanding a broader portfolio of solutions, support and services. In addition, they bargain intensely on all aspects of the contractual arrangement, seeking more favorable terms at an overall lower cost. As such, customers generally negotiate the total value of the arrangement rather than just unit pricing or volumes.

We provide our products in four common groupings, or platforms, with hundreds of products within each platform. We enhance the value of our offerings by providing additional rights such as multiple copies of the tools, post-contract customer support, expanded license usage related to duration, location and quantity, contractor and site access, future purchase rights and other unique rights. In some instances, we provide customers with the ability to purchase pools of technology to address a broad spectrum of their design needs and enable our customers to exchange certain quantities of licensed software for unspecified future technology. We also offer post-contract customer support and services. These elements of added value, in addition to per-copy pricing, are some of the many factors which our customers consider when making purchasing decisions.

Historically, revenue has grown primarily as a result of increased customer demand for these additional rights related to our products, and, more recently, as a result of the impact of our business model shift as discussed below. In general, as our customers negotiate increased rights, the value of the contracts with those customers increases. Collectively, the increase in the value of all of our customer contracts is the primary driver of our overall growth in revenue over time. As further described below, the effect of an increase in value for a particular customer is typically recognized over the life of the customer contract rather than in the particular period in which the enhanced license transaction is completed.

As a result of customers seeking to conserve cash, we shifted our business model in the fourth quarter of 2004 to allow a substantial majority of our customers to pay for licenses over a period of

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time, rather than upfront at the time of initial purchase. Extended payment terms, as well as arrangements with technology pools and rights to unspecified future products, generate recurring revenue over a period of time, generally three years, rather than non-recurring upfront license revenue. Accordingly, most of the revenue we recognize in any particular quarter results from our selling efforts in each of the prior periods during the last three or so years rather than from efforts or changes in the current period. This business model reduces our dependence on license arrangements that generate non-recurring upfront license revenue in a particular period and provides us with the ability to resist typical software industry quarter-end pressures and to decline business with terms, including pricing terms, which may be less favorable to us. We continue to target achieving greater than 90% of our total revenue as recurring revenue, which we refer to in our financial statements as time-based license and maintenance and service revenue.

#### Fiscal 2008 Financial Performance Summary

Total revenue of \$1,337.0 million was up 10% from \$1,212.5 million in fiscal 2007. The increase was primarily attributable to bookings of Technology Subscription Licenses (TSLs) in prior periods which increase time-based revenue recognized in later periods and to a lesser extent from Synplicity product sales from our acquisition in May 2008.

Time-based license revenue of \$1,125.8 million was up 12% from \$1,004.0 million in fiscal 2007. The increase was primarily attributable to bookings of TSLs in prior periods which increase time-based revenue recognized in later periods.

Upfront license revenue of \$71.4 million was up 6% from \$67.5 million in fiscal 2007. The increase included the impact of Synplicity product sales.

We derived approximately 95% of our total revenue from time-based revenues, maintenance and services, and 5% from upfront revenue in fiscal 2008, compared to approximately 94% and 6%, respectively, in fiscal 2007. This reflects our continued adherence to our business model.

Maintenance revenue of \$66.6 million was down 8% from \$72.2 million in fiscal 2007. This decrease in maintenance revenue was primarily attributable to the fact that maintenance has been bundled and not charged separately after the business model shift in the fourth quarter of fiscal 2004. Professional service and other revenue of \$73.1 million was up 6% from \$68.7 million in fiscal 2007, increased primarily due to the timing and acceptance of performed milestones under existing service contracts.

Net income of \$190.0 million was up 46% from \$130.5 million in fiscal 2007. The increase was primarily due to increases in revenues.

#### Fiscal 2008, 2007 and 2006 Acquisitions

We have acquired a number of companies or their assets in recent years, and as part of our efforts to expand our product and services offerings we expect to make additional acquisitions in the future. Below is a list of our principal acquisitions during the last three fiscal years. See Note 3 of *Notes to Consolidated Financial Statements* for further information on our acquisitions, which information is included herein.

#### Fiscal 2008

Synplicity, Inc.	Provides innovative field programmable gate array (FPGA), IC
	design and verification solutions that served a wide range of
	communications, military/aerospace, semiconductor, consumer,
	computer, and other electronic applications markets.
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Fiscal 2007	
ArchPro Design	Provides low power verification technologies designed to help
Automation, Inc.	customers address power management challenges in multi-voltage designs.
Assets of MOSAID	Increases the breadth of Synopsys' offerings in standards-based
Technologies Inc.	connectivity intellectual property by adding a line of double data rate (DDR2) memory controllers and related products.
Sandwork Design, Inc.	Provides tools to efficiently analyze and debug complex analog and mixed signal systems-on-chips, complementing Synopsys' existing simulation solutions.
Fiscal 2006	
HPL Technologies, Inc.	Provides manufacturing software that links directly into the semiconductor manufacturing process.
Virtio Corporation, Inc.	Provides the technology to allow "virtual prototyping" of a complete system, to enable customers to develop the necessary system software elements earlier, to help accelerate systems to market.
Sigma-C Software AG	Provides simulation software that helps increase IC wafer yields
-	by allowing Synopsys' customers to perform more accurate
	design layout analysis.
Critical Accounting Policies a	nd Estimates

## **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial results under the heading "Result of Operations" below are based on our audited consolidated financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles. In preparing these financial statements, we make assumptions, judgments and estimates that can affect the reported amounts of assets, liabilities, revenues and expenses and net income. On an on-going basis, we evaluate our estimates based on historical experience and various other assumptions we believe are reasonable under the circumstances. Our actual results may differ from these estimates. For further information on our significant accounting policies, see Note 2 of Notes to Consolidated Financial Statements.

The accounting policies that most frequently require us to make assumptions, judgments and estimates, and therefore are critical to understanding our results of operations, are:

Revenue recognition;

Valuation of share-based compensation;

Valuation of intangible assets; and

Income taxes.

#### **Revenue Recognition**

We recognize revenue from software licenses and related maintenance and service revenue. Software license revenue consists of fees associated with the licensing of our software. Maintenance and service revenue consists of maintenance fees associated with perpetual and term licenses and professional service fees.

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We have designed and implemented revenue recognition policies in accordance with Statement of Position (SOP) 97-2, *Software Revenue Recognition*, as amended and EITF 00-21, *Revenue Arrangements with Multiple Deliverables*.

With respect to software licenses, we utilize three license types:

*Technology Subscription Licenses (TSLs)* are time-based licenses for a finite term, and generally provide the customer limited rights to receive, or to exchange certain quantities of licensed software for, unspecified future technology. We bundle and do not charge separately for post-contract customer support (maintenance) for the term of the license.

*Term Licenses* are also for a finite term, but do not provide the customer any rights to receive, or to exchange licensed software for, unspecified future technology. Customers purchase maintenance separately for the first year and may renew annually for the balance of the term. The annual maintenance fee is typically calculated as a percentage of the net license fee.

*Perpetual Licenses* continue as long as the customer renews maintenance plus an additional 20 years. Perpetual licenses do not provide the customer any rights to receive, or to exchange licensed software for, unspecified future technology. Customers purchase maintenance separately for the first year and may renew annually.

For the three software license types, we recognize revenue as follows:

*TSLs*. We typically recognize revenue from TSL fees (which include bundled maintenance) ratably over the term of the license period, or as customer installments become due and payable, whichever is later. Revenue attributable to TSLs is reported as "time-based license revenue" in the consolidated statement of operations.

*Term Licenses.* We recognize revenue from term licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these term licenses is reported as "upfront license revenue" in the consolidated statement of operations. For term licenses in which less than 75% of the license fee is due within one year from shipment, we recognize revenue as customer installments become due and payable. Such revenue is reported as "time-based license revenue" in the consolidated statement of operations.

*Perpetual Licenses.* We recognize revenue from perpetual licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these perpetual licenses is reported as "upfront license revenue" in the consolidated statement of operations. For perpetual licenses in which less than 75% of the license fee is payable within one year from shipment, we recognize the revenue as customer installments become due and payable. Revenue attributable to these perpetual license revenue" in the consolidated statement of operations.

We generally recognize revenue from hardware sales in full upon shipment if all other revenue recognition criteria are met. If a technology subscription license is incorporated into the hardware, we recognize revenue ratably over the term of the software license period, or as customer installments become due and payable, whichever is later. Revenue attributable to these hardware sales is reported as "upfront license revenue" in the consolidated statement of operations.

In addition, we recognize revenue from maintenance fees ratably over the maintenance period to the extent cash has been received and recognize revenue from professional service and training fees as such services are performed and accepted by the customer. Revenue attributable to maintenance, professional services and training is reported as "maintenance and service revenue" in the consolidated statement of operations.

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Our determination of fair value of each element in multiple element arrangements is based on vendor-specific objective evidence (VSOE). We limit our assessment of VSOE of fair value for each element to the price charged when such element is sold separately.

We have analyzed all of the elements included in our multiple-element software arrangements and have determined that we have sufficient VSOE to allocate revenue to the maintenance components of our perpetual and term license products and to professional services. Accordingly, assuming all other revenue recognition criteria are met, we recognize license revenue from perpetual and term licenses upon delivery using the residual method, we recognize revenue from maintenance ratably over the maintenance term, and we recognize revenue from professional services as milestones are performed and accepted. We recognize revenue from TSLs ratably over the term of the license, assuming all other revenue recognition criteria are met, since there is not sufficient VSOE to allocate the TSL fee between license and maintenance services.

We make significant judgments related to revenue recognition. Specifically, in connection with each transaction involving our products, we must evaluate whether: (1) persuasive evidence of an arrangement exists, (2) delivery of software or services has occurred, (3) the fee for such software or services is fixed or determinable, and (4) collectability of the full license or service fee is probable. All four of these criteria must be met in order for us to recognize revenue with respect to a particular arrangement. We apply these revenue recognition criteria as follows:

*Persuasive Evidence of an Arrangement Exists.* Prior to recognizing revenue on an arrangement, our customary policy is to have a written contract, signed by both the customer and us or a purchase order from those customers that have previously negotiated a standard end-user license arrangement or purchase agreement.

*Delivery Has Occurred.* We deliver our products to our customers electronically or physically. For electronic deliveries, delivery occurs when we provide access to our customers to take immediate possession of the software by downloading it to the customer's hardware. For physical deliveries, the standard transfer terms are typically FOB shipping point. We generally ship our products or license keys promptly after acceptance of customer orders. However, a number of factors can affect the timing of product shipments and, as a result, timing of revenue recognition, including the delivery dates requested by customers and our operational capacity to fulfill product orders at the end of a quarter.

*The Fee is Fixed or Determinable.* Our determination that an arrangement fee is fixed or determinable depends principally on the arrangement's payment terms. Our standard payment terms for perpetual and term licenses require 75% or more of the license fee to be paid within one year. If the arrangement includes these terms, we regard the fee as fixed or determinable, and recognize all license revenue under the arrangement in full upon delivery (assuming all other revenue recognition criteria are met). If the arrangement does not include these terms, we do not consider the fee to be fixed or determinable and generally recognize revenue when customer installments are due and payable. In the case of a TSL, because of the right to exchange products or receive unspecified future technology and because VSOE for maintenance services does not exist for a TSL, we recognize revenue ratably over the term of the license, but not in advance of when customers' installments become due and payable, even if the fee is otherwise fixed or determinable.

*Collectability is Probable.* We judge collectability of the arrangement fees on a customer-by-customer basis pursuant to our credit review policy. We typically sell to customers with whom we have a history of successful collection. For a new customer, or when an existing customer substantially expands its commitments to us, we evaluate the customer's financial position and ability to pay and typically assign a credit limit based on that review. We increase the credit limit only after we have established a successful collection history with the customer.



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If we determine at any time that collectability is not probable under a particular arrangement based upon our credit review process or the customer's payment history, we recognize revenue under that arrangement as customer payments are actually received.

*Valuation of Share-Based Compensation.* We account for share-based compensation in accordance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 123 (Revised 2004), *Share-Based Payment* (SFAS 123(R)). Under SFAS No. 123(R), share-based compensation expense is measured at the grant date based on the fair value of the award and is recognized as expense over the vesting period. We use the Black-Scholes option-pricing model to determine the fair value of stock options and employee stock purchase plan awards. The Black-Scholes option-pricing model incorporates various subjective assumptions including expected volatility, expected term and the risk-free interest rates. We estimate the expected volatility by a combination of implied volatility for publicly traded options of our stock with a term of six months or longer and the historical stock price volatility over the estimated expected term of our share-based awards. We determine the expected term of our share-based awards based on historical experience. In addition, judgment is required in estimating the forfeiture rate on share-based awards. We calculate the expected forfeiture rate based on average historical trends. These input factors are subjective and are determined using management's judgment. If a difference arises between the assumptions used in determining share-based compensation cost and the actual factors which become known over time, we may change the input factors used in determining future share-based compensation costs. Any such changes could materially impact our results of operations in the period in which the changes are made and in periods thereafter.

*Valuation of Intangible Assets.* We evaluate our intangible assets for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased technology, contract rights intangibles, customer-installed base/relationships, trademarks and trade names, covenants not to compete, customer backlog, capitalized software development and other intangibles. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, we reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on our reported financial results. We did not record any impairment charges on our intangible assets during fiscal 2008. As of October 31, 2008, the carrying amount of our intangible assets, was \$114.8 million.

*Income Taxes.* We calculate our current and deferred tax provisions in accordance with SFAS No. 109, *Accounting for Income Taxes* (SFAS 109). Our estimates and assumptions used in such provisions may differ from the actual results as reflected in our income tax returns and we record the required adjustments when they are identified and resolved.

We adopted FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109 (FIN 48) and FASB Staff Position No. 48-1 (FSP FIN 48-1) in the first quarter of fiscal 2008. The interpretation contains a two-step approach to recognizing and measuring uncertain tax positions accounted for in accordance with SFAS 109. The first step is to evaluate the tax position for recognition by determining whether it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. In May 2007, the FASB issued FSP FIN 48-1 which amended



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FIN 48 to provide guidance about how an enterprise should determine whether a tax position is effectively settled for the purpose of recognizing previously unrecognized tax benefits. Under FSP FIN 48-1, a tax position could be effectively settled on completion of an examination by a taxing authority if certain other conditions are satisfied.

We recognize deferred tax assets and liabilities for the temporary differences between the book and tax bases of assets and liabilities using enacted tax rates in effect for the year in which we expect the differences to reverse. We record a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized. In evaluating our ability to utilize our deferred tax assets, we consider all available positive and negative evidence, including our past operating results, the existence of cumulative losses in the most recent fiscal years and our forecast of future taxable income on a jurisdiction by jurisdiction basis, as well as feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we are using to manage the underlying businesses. We believe that the net deferred tax assets of \$302.7 million that are recorded on our balance sheet will ultimately be realized. However, if we determine in the future that it is more likely than not we will not be able to realize a portion or the full amount of deferred tax assets, we would record an adjustment to the deferred tax asset valuation allowance as a charge to earnings in the period such determination is made.

Included in our net deferred tax assets are federal foreign tax credits of \$70.1 million of which \$63.9 million will expire from fiscal 2013 through 2018 and the remaining \$6.2 million in foreign tax credits from acquired companies, which have a valuation allowance of \$3.4 million, will expire between fiscal 2009 and 2017. Foreign tax credits can only be carried forward ten years, unlike net operating loss and federal research credit carryforwards that have a twenty year carryforward period, and may only be used after foreign tax credits arising in each subsequent year have been used first. Our ability to utilize foreign tax credits is dependent upon having sufficient foreign source income during the carryforward period. We have recorded a valuation allowance of \$19.7 million during the fiscal year with respect to our foreign tax credit carryforward, of which \$14.6 million was recorded as a result of the 2000-2001 final IRS settlement. See *Results of Operations Income Taxes IRS Examinations*, below, and Note 9 of *Notes to Consolidated Financial Statements*. The need for a valuation allowance with respect to foreign tax credits is subject to change based upon a number of factors, including the amount of foreign tax credits arising in future years, our forecasts of future foreign source income, the amount of our undistributed earnings of our foreign subsidiaries and changes in income tax laws that may affect our ability to use such credits.

As of October 31, 2008, we have not provided taxes for undistributed earnings of our foreign subsidiaries because we plan to reinvest such earnings indefinitely outside the United States. If the cumulative foreign earnings exceed the amount we intend to reinvest in foreign countries in the future, we would provide taxes on such excess amount. As of October 31, 2008, there was approximately \$243.0 million of earnings upon which U.S. income taxes have not been provided.

In addition, the calculation of tax liabilities involves the inherent uncertainty associated with the application of complex tax laws. We are also subject to examination by various taxing authorities. We believe we have adequately provided in our financial statements for potential additional taxes. If we ultimately determine that these amounts are not owed, we would reverse the liability and recognize the tax benefit in the period in which we determine that the liability is no longer necessary. If an ultimate tax assessment exceeds our estimate of tax liabilities, we would record an additional charge to earnings. See *Results of Operations Income Taxes IRS Examinations*, below, and Note 9 *Motes to Consolidated Financial Statements* for a discussion of the Revenue Agent's Reports from the IRS we received in June 2005 and July 2008 asserting very large net increases to our U.S. tax arising from the audit of fiscal 2000 through 2001 and fiscal 2002 through 2004, respectively.



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## **Results of Operations**

Our fiscal year ends on the Saturday nearest October 31. Our current fiscal year ended November 1, 2008. Every seven years we have one extra week in our fiscal year that occurs in our first quarter. Fiscal 2008 and 2006 were 52-week years. Fiscal 2007 was a 53-week fiscal year and the additional week was contained in the first quarter. The extra week in fiscal 2007 resulted in approximately \$18.7 million of additional revenue related primarily to time-based licenses and approximately \$17.2 million of additional expenses.

#### Revenue Background

We generate our revenue from the sale of software licenses, hardware products, maintenance and professional services. Under current accounting rules and policies, we recognize revenue from orders we receive for software licenses and services at varying times. In most instances, we recognize revenue on a TSL software license order over the license term and on a term or perpetual software license order in the quarter in which the license is shipped. Substantially all of our current time-based licenses are TSLs with an average license term of approximately three years. Maintenance orders normally bring in revenue ratably over the maintenance period (normally one year). Revenue from professional service orders is generally recognized as milestones are performed and accepted by the customer. Upon the acquisition of Synplicity, we began selling hardware products and to recognize revenue generally upon shipment. A more complete description of our revenue recognition policy can be found above under *Critical Accounting Policies and Estimates*.

Our revenue in any fiscal quarter is equal to the sum of our time-based license, upfront license, hardware product sales, maintenance and professional service revenue for the period. We derive time-based license revenue in any quarter largely from TSL orders received and delivered in prior quarters. We derive upfront license revenue directly from term and perpetual license orders mostly booked and shipped during the quarter. We derive maintenance revenue in any quarter largely from maintenance orders received in prior quarters since our maintenance orders generally yield revenue ratably over a term of one year. We also derive professional service revenue primarily from orders received in prior quarters, since we recognize revenue from professional services when those services are delivered and accepted, not when they are booked.

Our license revenue is sensitive to the mix of TSLs and perpetual or term licenses delivered during a reporting period. A TSL order typically yields lower current quarter revenue but contributes to revenue in future periods. For example, a \$120,000 order for a three-year TSL shipped on the last day of a quarter typically generates no revenue in that quarter, but \$10,000 in each of the twelve succeeding quarters. Conversely, perpetual licenses and term licenses with greater than 75% of the license fee due within one year from shipment typically generate current quarter revenue but no future revenue (e.g., a \$120,000 order for a perpetual license generates \$120,000 in revenue in the quarter the product is shipped, but no future revenue).

Total Revenue

	Year	Ended Octob	er 31,	\$ Change	% Change	\$ Change	% Change	
	2008	2007	2006	2007 t	o 2008	2006 1	to 2007	
			(de	ollars in millio	ns)			
	\$1,337.0	\$1,212.5	\$1,095.6	\$124.5	10%	\$116.9	11%	
to1	norrowing for f	and 2008 and	meaned to fice	al 2007 was a	mina ani lu dua a	to hoolings i	n mai on vioono 100	dina

The increase in total revenue for fiscal 2008 compared to fiscal 2007 was primarily due to bookings in prior years leading to increased current period time-based license revenue. Additionally, total revenue increased by approximately 1% due to the strength of the Japanese yen against the U.S dollar. The increase was partially offset by fiscal 2008 having one less week of revenue of approximately \$18.7 million compared to fiscal 2007.

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The increase in total revenue for fiscal 2007 compared to fiscal 2006 was primarily due to (1) increased bookings of licenses generating time-based revenue reflecting the business model shift in the fourth quarter of fiscal 2004 and the transition to more TSLs in prior periods that continued to contribute to time-based license revenue in later periods, and (2) the fact that fiscal 2007 had 53 weeks compared to 52 weeks in fiscal 2006, resulting in one week's additional time-based revenue being recognized in fiscal 2007. The increase was partially offset by a decrease in maintenance and service revenue. Foreign currency fluctuations did not have a significant impact to fiscal 2007 as compared to fiscal 2006.

As discussed above in the *Business Environment Summary*, we shifted our business model in the fourth quarter of fiscal 2004. In fiscal 2008 and forward, the model shift itself no longer contributes to the increases in total revenue or time-based revenue.

## Time-Based License Revenue

	Year E	nded October	· 31,	\$ Change	% Change	\$ Change	% Change
	2008	2007	2006	2007	to 2008	2006	to 2007
			(do	llars in mill	ions)		
	\$1,125.8	\$1,004.0	\$874.9	\$121.8	12	% \$129.1	15%
Percentage of total revenue	84%	83%	80%				

The increase in time-based license revenue for fiscal 2008 compared to fiscal 2007 was primarily due to higher bookings in fiscal 2007 which contributed to the increase of time-based license revenue in fiscal 2008. TSL revenue continued to be the major contributor to total revenue since our business model shift in the fourth quarter of fiscal 2004. In addition, but to a lesser extent, the increase in time-based license revenue in fiscal 2008 from fiscal 2007 resulted from entering into more contracts in which revenue was recognized as installment payments become due and payable. The increase was partially offset by fiscal 2008 having one less week of revenues of approximately \$17.2 million compared to fiscal 2007.

The increase in time-based license revenue for fiscal 2007 compared to fiscal 2006 was primarily due to (1) increased bookings of TSLs in prior periods which increased time-based revenue recognized in later periods, (2) the business model shift in the fourth quarter of fiscal 2004 and transition to more TSLs in prior periods that continued to contribute to time-based license revenue in later periods, and (3) the fact that fiscal 2007 had 53 weeks compared to 52 weeks in fiscal 2006, resulting in one week's additional time-based revenue being recognized in fiscal 2007.

Upfront License Revenue

	Year Ei	nded Octo	ber 31,	\$ Chang	e % Change	\$ C	hange	% Change
	2008	2007	2006	200	07 to 2008		2006	to 2007
				(dollars	in millions)			
	\$71.4	\$67.5	\$63.1	\$ 3.9	6	% \$	4.4	7%
Percentage of total revenue	5%	6%	6%	2				

The increase in upfront license revenue for fiscal 2008 compared to fiscal 2007 was primarily due to new Synplicity product sales.

The slight increase in upfront license revenue for fiscal 2007 compared to fiscal 2006 was primarily due to normal changes in customer license type requirements during the year and is consistent with our shift towards TSLs.

## Maintenance and Service Revenue

	Year H	Ended Octo	ber 31,	\$ Char	nge % Change	e \$ Change	% Change
	2008	2007	2006	2	007 to 2008	2006	to 2007
				(dollars i	in millions)		
Maintenance revenue	\$ 66.6	\$ 72.2	\$103.1	\$ (5	.6) (8	8)% \$ (30.9)	(30)%
Professional service and other							
revenue	73.1	68.7	54.5	4	.4 0	5% 14.2	26%
Total	\$139.7	\$140.9	\$157.6	\$ (1	.2) (1	1)% \$ (16.7)	(11)%
Percentage of total revenue	11%	5 11%	149	6			

Percentage of total revenue 11% 11% 14% Our maintenance revenue declined in fiscal 2008 compared to fiscal 2007 primarily due to (1) our completed shift towards TSLs, which include maintenance with the license fee and thus generate no separately recognized maintenance and service revenue, and (2) the first quarter of fiscal 2008 having one less week of revenues, resulting in a decrease in revenue of approximately \$1.5 million compared to fiscal 2007.

Our maintenance revenue declined in fiscal 2007 compared to fiscal 2006, primarily due to our shift towards TSLs, which include maintenance with the license fee and thus generate no separately recognized maintenance revenue, as well as non-renewal of maintenance by some customers on perpetual or term licenses.

Professional services and other revenue increased in fiscal 2008 compared to fiscal 2007, and increased in fiscal 2007 compared to fiscal 2006, primarily due to timing of customer acceptance of performance milestones and services performed under ongoing contracts.

## **Events Affecting Cost of Revenues and Operating Expenses**

*Functional Allocation of Operating Expenses.* We allocate certain human resource, information technology and facility expenses among our functional income statement based on headcount within each functional area. Annually, or upon a significant change in headcount (such as a workforce reduction, realignment or acquisition) or other factors, management reviews the allocation methodology and the expenses included in the allocation pool.

## Cost of Revenue

Year Ei	nded Octob	er 31,	<b>\$ C</b>	hange	% Change	<b>\$ (</b>	Change	% Change		
2008	2007	2006		2007	to 2008		2006	to 2007		
(dollars in millions)										
\$172.0	\$146.4	\$129.0	\$	25.6	179	6\$	17.4	13%		
63.6	64.4	66.0		(0.8)	(1)	%	(1.6)	(2)%		
23.3	23.5	28.5		(0.2)	$(1)^{\circ}$	%	(5.0)	(18)%		
\$258.9	\$234.3	223.5	\$	24.6	109	6\$	10.8	5%		
19%	19%	20%	,							
		37								
	2008 \$172.0 63.6 23.3 \$258.9	2008 2007   \$172.0 \$146.4   63.6 64.4   23.3 23.5   \$258.9 \$234.3	2008     2007     2006       \$172.0     \$146.4     \$129.0       63.6     64.4     66.0       23.3     23.5     28.5       \$258.9     \$234.3     223.5       19%     19%     20%	2008     2007     2006     (doll: (doll:       \$172.0     \$146.4     \$129.0     \$       63.6     64.4     66.0     \$       23.3     23.5     28.5     \$       \$258.9     \$234.3     223.5     \$       19%     19%     20%     \$	2008     2007     2006     2007       \$172.0     \$146.4     \$129.0     \$25.6       63.6     64.4     66.0     (0.8)       23.3     23.5     28.5     (0.2)       \$258.9     \$234.3     223.5     \$24.6       19%     19%     20%	2008     2007     2006     2007 to 2008 (dollars in millions)       \$172.0     \$146.4     \$129.0     \$25.6     179       63.6     64.4     66.0     (0.8)     (1)9       23.3     23.5     28.5     (0.2)     (1)9       \$258.9     \$234.3     223.5     \$24.6     109       19%     19%     20%     109     109	2008   2007   2006   2007 to 2008   2007 to 2008     \$172.0   \$146.4   \$129.0   \$25.6   17% \$     63.6   64.4   66.0   (0.8)   (1)%     23.3   23.5   28.5   (0.2)   (1)%     \$258.9   \$234.3   223.5   \$24.6   10% \$     19%   19%   20%   5   5   5	2008   2007   2006   2007 to 2008 (dollars in millions)   2006   2007 to 2008   2006     \$172.0   \$146.4   \$129.0   \$25.6   17% \$17.4     63.6   64.4   66.0   (0.8)   (1)%   (1.6)     23.3   23.5   28.5   (0.2)   (1)%   (5.0)     \$258.9   \$234.3   223.5   \$24.6   10% \$10.8     19%   19%   20%   10%   \$10.8		

We divide cost of revenue into three categories: cost of license revenue, cost of maintenance and service revenue, and amortization of intangible assets. Expenses directly associated with providing consulting and training are allocated between cost of license revenue and cost of maintenance and service revenue based on license and service revenue reported.

*Cost of license revenue.* Cost of license revenue includes costs associated with our software product sales as well as our costs of materials associated with our hardware products. Additionally, cost of license revenue also includes allocated costs of license delivery, such as employee salaries and benefits related to software production costs, product packaging, product delivery, amortization of capitalized software development costs, documentation and royalties to third party vendors.

*Cost of maintenance and service revenue.* Cost of maintenance and service revenue includes employee salary and benefits for consulting professionals and associated costs to maintain the infrastructure necessary to operate our services and training organization. Further, cost of maintenance and service revenue also includes allocated costs which provide post customer contract services, such as employee salary and benefits related to customer services, such as hotline and on-site support, production services and documentation of maintenance updates.

Amortization of intangible assets. Amortization of intangible assets, which is amortized to cost of revenue and operating expenses, includes the amortization of the contract rights associated with certain executory contracts and the amortization of core/developed technology, trademarks, tradenames, customer relationships, covenants not to compete and other intangibles related to acquisitions.

Cost of revenue as a percentage of total revenue was flat at 19% for both fiscal 2008 and fiscal 2007. The increase in cost of revenue in fiscal 2008 compared to fiscal 2007 was primarily due to (1) an increase of \$20.8 million in personnel-related costs as a result of our acquisition of Synplicity in fiscal 2008, (2) an increase of \$2.7 million in functionally allocated expenses as previously described, and (3) an increase of \$2.9 million in direct costs as a result of hardware costs. The increase was partially offset by (1) the decline in fair value of \$2.0 million in our deferred compensation plan obligation, and (2) one less week of costs of approximately \$3.6 million in fiscal 2008 compared with fiscal 2007.

The increase in total cost of revenue in fiscal 2007 compared to fiscal 2006 was primarily due to (1) an increase of \$12.6 million in compensation and employee benefits due to our increased personnel costs as a result of acquisitions in fiscal 2007 and in late fiscal 2006, (2) an increase of \$1.2 million in direct costs as a result of increased shipments during fiscal 2007, (3) 53 weeks of costs in fiscal 2007 instead of 52 weeks in fiscal 2006, and (4) \$1.0 million increase in functionally allocated expenses. This increase was partially offset by a decrease of \$5.0 million in amortization of certain intangible assets as a result of intangible assets acquired in prior years becoming fully amortized during fiscal 2007.

## **Operating Expenses**

Research and Development

	Year E	nded Octob	er 31,	S Cha	\$ ange	% Change		\$ Cha	nge	% Chang	ge
	2008	2007	2006		2007 to	2008		2	2006 ta	2007	
			(dol	lars i	in milli	ons)					
	\$394.7	\$379.2	\$370.6	\$	15.5	49	6	\$	8.6		2%
Percentage of total revenue	29%	31%	34%								

The increase in research and development expense in fiscal 2008 compared to fiscal 2007 was primarily due to (1) an increase of \$32.0 million in employee personnel related costs as a result of headcount increases, including from our recent acquisition, and (2) an increase of \$7.6 million in functionally allocated expenses as previously described compared to fiscal 2007. The increase was

partially offset by (1) \$18.4 million decline in the fair value of our deferred compensation plan obligation as a result of the overall decline of the financial market, (2) the absence of a \$3.1 million earn-out/retention bonus related to a prior year acquisition, and (3) one extra week of costs incurred in fiscal 2007 of approximately \$6.6 million.

The increase in research and development expense in fiscal 2007 compared to fiscal 2006 was primarily due to an increase of \$17.5 million in increased personnel and related costs as a result of acquisitions in fiscal 2007 and in late fiscal 2006, in addition to an extra week of expenses in fiscal 2007. This increase was partially offset by (1) a decrease of \$3.8 million in share-based compensation expense, (2) a decrease of \$4.8 million in general operational activities such as expenses for travel, entertainment, communications, depreciation, and (3) to a lesser extent by reductions in functionally allocated expenses compared to fiscal 2006.

Sales and Marketing

	Year E	nded Octob	er 31,	\$ Change	% Change	\$ Change	% Change
	2008	2007	2006	2007 to	o 2008	2006 t	o 2007
			(dol	lars in milli	ions)		
	\$334.8	\$349.4	\$330.4	\$ (14.6)	$(4)^{a}$	% \$ 19.0	6%
Percentage of total revenue	25%	29%	30%				

The decrease in sales and marketing expense in fiscal 2008 compared to fiscal 2007 was primarily due to (1) a decrease of \$14.7 million in personnel related costs as a result of a decrease in headcount and the impact of \$8.0 million decline in the fair value of our deferred compensation plan obligation, and (2) one less week of costs of approximately \$5.4 million compared to fiscal 2007. The decrease was partially offset by an increase of \$3.4 million in employee, travel and communication related expenses.

The increase in sales and marketing expense in fiscal 2007 compared to fiscal 2006 was primarily due to (1) an increase of \$13.3 million in variable compensation as a result of increased shipments, and (2) an increase of \$11.3 million in sales and marketing personnel related costs, employee functions and an extra week of expense in fiscal 2007. This increase was partially offset by a decrease of \$3.3 million in general operation activities such as travel, entertainment, communications, depreciation and a \$2.8 million reduction in functionally allocated expenses compared to fiscal 2006.

General and Administrative

	Year H	Ended Octol	oer 31,	\$ Chang	% e Change	\$ Change	% Change
	2008	2007	2006	200	7 to 2008	2006 1	to 2007
			(dol	llars in n	nillions)		
	\$103.9	\$101.7	\$112.9	\$ 2.	2 29	% \$ (11.2)	(10)%
Percentage of total revenue	8%	8%	10%				

The increase in general and administrative expense in fiscal 2008 compared to fiscal 2007 was primarily due to (1) an increase of \$7.2 million in personnel related costs, and (2) an absence of \$4.3 million gain for a land sale completed during fiscal 2007 and recorded as an offset to expense under this line item. The increase was partially offset by (1) \$5.0 million decline in the fair value of our deferred compensation plan obligation, and (2) one less week of expenses of approximately \$1.5 million in fiscal 2008 compared to fiscal 2007.

The decrease in general and administrative expense in fiscal 2007 compared to fiscal 2006 was primarily due to (1) a decrease of \$8.6 million in expenses related to professional services primarily for legal, Sarbanes-Oxley Act compliance, tax and audit matters, (2) a decrease of \$3.2 million in depreciation expense as a result of improving efficiencies in our operations and cost control efforts, and (3) a gain of \$4.3 million, net of related expenses, for a land sale recorded as an offset to expense



under this line item. These decreases were offset by (1) an increase of \$2.9 million in expense related to facility operations, (2) a net increase of \$2.3 million in functionally allocated expenses , and (3) an extra week of expenses in fiscal 2007.

## Change in Fair Value of Deferred Compensation.

The income or loss due to the change in fair value of the non-qualified deferred compensation plan obligation is recorded in each functional operating expense. The offsetting income or loss due to the change in fair value of the non-qualified deferred compensation plan asset is recorded in other income, net. The overall net impact to our consolidated statements of operations from the income or loss of our deferred compensation plan obligation and assets is immaterial for all periods presented.

The decrease in fair value of deferred compensation plan obligation is reported in total cost of revenue, research and development, sales and marketing, and general and administrative expenses. The year-over-year effect of the fair value change is approximately \$33.4 million. This change is a result of the declining financial markets in fiscal 2008. Correspondingly, the decrease in the fair value of the deferred compensation plan asset is approximately \$32.8 million in fiscal 2008 compared to fiscal 2007 and reported in other income, net. Change in the fair value of our deferred compensation plan did not have a material impact to total cost of revenue or total operating expenses in fiscal 2007 and fiscal 2006. See Note 8 and 10 of *Notes to Consolidated Financial Statements* Employee Benefit Plans and Other (Loss) Income, Net.

## Effect of Foreign Currency on Expenses.

Foreign currency fluctuations, net of hedging, did not have a significant impact to expenses during fiscal 2008 as compared to fiscal 2007 or fiscal 2007 as compared to fiscal 2006.

## In-Process Research and Development.

In-process research and development (IPRD) expense is comprised of in-process technologies of \$4.8 million associated with the acquisition of Synplicity in fiscal 2008, \$3.2 million associated with the acquisitions of ArchPro Design Automation and Sandwork Design in fiscal 2007, and \$0.8 million associated with the acquisition of HPL Technologies in fiscal 2006. At the date of each acquisition, the projects associated with the IPRD efforts had not yet reached technological feasibility and the research and development in process had no alternative future uses. Accordingly, these amounts were charged to expense on the respective acquisition date of each of the acquired companies.

*Valuation of IPRD.* Upon acquisition of other companies, we expense any IPRD as it represents incomplete research and development projects that had not reached technological feasibility and had no alternative future use as of the acquisition date. The value assigned to IPRD is determined by considering the importance of each project to our overall development plan, estimating costs to develop the IPRD into commercially viable products, estimating the resulting net cash flows from such projects when completed and discounting the net cash flows back to their present value. The utilized discount rate is our weighted-average cost of capital, taking into account the inherent uncertainties in future revenue estimates and the profitability of such technology, the successful development of the IPRD, its useful life and the uncertainty of technological advances, all of which are unknown at the time of determination.

*Synplicity.* On May 15, 2008, we acquired Synplicity, Inc. (Synplicity), a leading supplier of innovative FPGA and IC design and verification solutions. The IPRD expense related to this acquisition was \$4.8 million, and consisted of four primary projects in process at the time of acquisition: FPGA, ASIC Verification, DSP, and HAPS. We expect that these projects will be completed over a period of approximately two years.

*Sandwork.* On October 1, 2007, we acquired Sandwork Design, Inc. (Sandwork), a company with tools to efficiently analyze and debug complex Analog Mixed Signal (AMS) systems-on-chips (SoCs). The IPRD expense related to this acquisition was \$1.1 million. Sandwork had two projects in process at the time of acquisition which we anticipate will be completed over a period of approximately two years.

*ArchPro.* On June 14, 2007, we acquired ArchPro Design Automation, Inc. (ArchPro), a company with modern power management verification technologies. The IPRD expense related to the ArchPro acquisition was \$2.1 million. ArchPro had several projects in process at the time of acquisition which we anticipate will be completed over a period of approximately two years.

*HPL.* On December 7, 2005, we acquired HPL Technologies, Inc. (HPL), a yield management and test chip technology company. The IPRD expense related to the HPL acquisition was \$0.8 million. HPL had one IPRD project which was completed during fiscal 2006 and the resulting products have begun to generate revenue. The expenditures to complete HPL's acquired in-process technologies approximated the original estimates.

#### Amortization of Intangible Assets.

Amortization of intangible assets includes the amortization of the contract rights associated with certain executory contracts and the amortization of core/developed technology, trademarks, trade names, customer relationships, covenants not to compete, and other intangibles related to acquisitions completed in prior years. Amortization expense is included in the consolidated statements of operations as follows:

	Year E	nded Octo	ber 31.		\$ ange	% Change	\$ Cha		% Change
	2008	2007	2006		2007 to	0		0	o 2007
			(	dolla	rs in mi	illions)			
Included in cost of revenue	\$23.3	\$23.5	\$28.5	\$	(0.2)	(1)9	%\$ (	(5.0)	(18)%
Included in operating expenses	20.8	26.6	27.9		(5.8)	(22)9	% (	(1.3)	(5)%
Total	\$44.1	\$50.1	\$56.4	\$	(6.0)	(12)	%\$(	(6.3)	(11)%

Percentage of total revenue3%4%5%Amortization of capitalized software development costs is included in cost of license revenue in the consolidated statements of operations.

The decrease in amortization of intangible assets in fiscal 2008 compared to fiscal 2007 was primarily due to completion of the amortization of certain intangible assets acquired in prior years' acquisitions, partially offset by the intangible assets acquired as a result of the acquisition of Synplicity.

The decrease in amortization of intangible assets in fiscal 2007 compared to fiscal 2006 was primarily due to completion of amortization of certain intangible assets acquired in prior year's acquisitions.

See Note 4 of *Notes to Consolidated Financial Statements* for a schedule of future amortization amounts which information is included herein.

Impairment of Intangible Assets. We did not record any impairment charges to the intangible assets during fiscal 2008, 2007, or 2006.



## Other Income, Net

				\$	%	\$	%
	Year En	ded Octo	ber 31,	Change	Change (	Change	Change
	2008	2007	2006	2007 to	2008	2006 t	to 2007
			(d	ollars in mil	lions)		
Interest income	\$ 21.2	\$25.7	\$15.2	\$ (4.5)	(18)% \$	5 10.5	69%
Income (loss) on assets related to executive deferred compensation							
plan(1)	(23.1)	9.7	4.6	(32.8)	(338)%	5.1	111%
Foreign currency exchange gain							
(loss)	6.6	0.8	(0.5)	5.8	725%	1.3	260%
Other, net(2)	(4.9)	11.6	(5.0)	(16.5)	(142)%	16.6	332%
Total	\$ (0.2)	\$47.8	\$14.3	\$ (48.0)	(100)% \$	33.5	234%

(1)

See Note 8 of Notes to the Consolidated Financial Statements for the employee benefit plans.

#### (2)

For fiscal 2007, the amount included a litigation settlement of \$12.5 million received from Magma.

#### **Income Taxes**

The relative proportions of our domestic and foreign revenue and income directly affect our effective tax rate. We are also subject to changing tax laws in the multiple jurisdictions in which we operate. As of October 31, 2008, current deferred tax assets, net of current deferred tax liabilities, totaled \$133.6 million. Non-current deferred tax assets, net of non-current deferred tax liabilities, totaled \$169.1 million. We believe it is more likely than not that our results of future operations will generate sufficient taxable income to utilize our net deferred tax assets. We consider future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for any valuation allowance, and if we determine we would not be able to realize all or part of our net deferred tax assets in the future, we would record a charge to income and an adjustment to the deferred tax assets in the period we make that determination.

Included in our net deferred tax assets are federal foreign tax credits of \$70.1 million of which \$63.9 million will expire from fiscal 2013 through 2018 and the remaining \$6.2 million in foreign tax credits from acquired companies, which have a valuation allowance of \$3.4 million, will expire between fiscal 2009 and 2017. Foreign tax credits can only be carried forward ten years, unlike net operating loss and federal research credit carryforwards that have a twenty year carryforward period, and may only be used after foreign tax credits arising in each subsequent year have been used first. Our ability to utilize foreign tax credits is dependent upon having sufficient foreign source income during the carryforward period. We recorded a valuation allowance of \$19.7 million during fiscal 2008 with respect to our foreign tax credit carryforward, of which \$14.6 million was recorded as a result of the 2000-2001 final IRS settlement. See *Results of Operations Income Taxes IRS Examinations*, below, and Note 9 of *Notes to Consolidated Financial Statements*. The need for a valuation allowance with respect to foreign tax credits is subject to change based upon a number of factors, including the amount of foreign tax credits arising in future years, our forecasts of future foreign source income, the amount of our undistributed earnings of our foreign subsidiaries and changes in income tax laws that may affect our ability to use such credits.

As of October 31, 2008, we have not provided taxes for undistributed earnings of our foreign subsidiaries because we plan to reinvest such earnings indefinitely outside the United States. If the cumulative foreign earnings exceed the amount we intend to reinvest in foreign countries in the future, we would provide taxes on such excess amount. As of October 31, 2008, there was approximately \$243.0 million of earnings upon which income taxes have not been provided.

## Effective Tax Rate

The following table presents the provision for income taxes and the effective tax rates for fiscal 2008, 2007 and 2006:

	Year En	Year Ended October 31,					
	2008	2007	2006				
	(dolla	(dollars in millions)					
Income before provision for income taxes	\$219.0	\$165.8	\$43.7				
Provision for income tax	\$ 29.0	\$ 35.3	\$19.0				
Effective tax rate	13.2%	21.3%	43.4%				

The fiscal 2008 tax rate is lower than fiscal 2007 primarily due to a favorable resolution being reached on transfer pricing issues related to the 2000-2001 IRS examination and additional research credits claimed on our 2007 federal and state tax returns. In addition, in October 2008, the Emergency Economic Stabilization Act of 2008 was enacted, which retroactively extended the research and development credit from January 1, 2008 through December 31, 2009. The fiscal 2007 tax rate is lower than fiscal 2006 primarily due to lower withholding taxes as a result of restructuring of certain of our foreign operations, and increased research credits. For fiscal 2006, the effective tax rate includes state tax expense of \$5.5 million for prior year state taxes, primarily as a result of state tax audits settled and a settlement offer made in fiscal 2006 and associated interest and penalties, as well as a reduction in an estimated fiscal 2005 state research and development credit benefit.

*Tax Effects of Stock Awards.* In November 2005, FASB issued a Staff Position (FSP) on FAS 123(R)-3, *Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards.* Effective upon issuance, this FSP describes an alternative transition method for calculating the tax effects of share-based compensation pursuant to SFAS 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of employee stock based compensation, and to determine the subsequent impact on the APIC pool and the statement of cash flows of the tax effects of employee share-based compensation awards that are outstanding upon adoption of SFAS 123(R). We elected to use the alternative transition method in fiscal 2006 and have not recognized any excess tax benefits during fiscal years 2008, 2007 and 2006. No tax benefit was recorded in the fiscal years 2008, 2007 and 2006 for expenses relating to the vesting of qualified stock options and share-based compensation costs which are borne by certain of our foreign subsidiaries.

#### **IRS** Examinations

We are regularly audited by the IRS.

#### Fiscal years 2000-2001

On June 8, 2005, we received a Revenue Agent's Report (RAR) in which the IRS proposed to assess a net tax deficiency for fiscal years 2000 and 2001 of approximately \$476.8 million, plus interest. This proposed adjustment primarily related to transfer pricing transactions between Synopsys and a wholly owned foreign subsidiary. On July 13, 2005, we filed a protest to the proposed deficiency with the IRS, which caused the matter to be referred to the Appeals Office of the IRS. On June 30, 2008, the IRS and Synopsys executed a final Closing Agreement pursuant to which substantially all of the proposed assessment was eliminated.

As a result of the final resolution of the transfer pricing issue, we decreased our FIN 48 liabilities by \$41.0 million in the third quarter of 2008, including interest accrued of \$2.8 million and recorded an increase to additional paid in capital of \$0.3 million. Concurrently, we evaluated our ability to use certain foreign tax credit carryovers which have been recorded as noncurrent deferred tax assets in its

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balance sheet, a portion of which may have been available to offset the FIN 48 liability. We concluded that it was no longer more likely than not that \$14.6 million of our foreign tax credits will be used prior to the expiration of the carryover period, and recorded a valuation allowance for this amount. Accordingly, our provision for income taxes includes an income tax benefit (net of decreases in related deferred tax assets) of \$17.3 million as a result of the 2000-2001 IRS settlement.

Notwithstanding the foregoing, the statute of limitations remains open with respect to fiscal years 2000-2001 for two related issues until the Appeals Office of the IRS has considered certain refund claims relevant to these years which are affected by the fiscal year 2002-2004 federal income tax audit. We have accrued the tax for these issues in accordance with a tentative settlement we reached with the IRS in December 2007.

#### Fiscal years 2002-2004

In the third quarter of 2006, the IRS started an examination of our federal income tax returns for the years 2002 through 2004. In July 2008, the IRS completed its field examination of these returns and issued an RAR in which the IRS proposed an adjustment that would result in an aggregate tax deficiency for the three year period of approximately \$236.2 million, \$130.5 million which would be a reduction of certain tax losses and credits that would otherwise be available either as refund claims or to offset taxes due in future periods. The IRS is contesting our tax deduction for payments made in connection with litigation between Avant! Corporation and Cadence Design Systems, Inc. In addition, the IRS has alleged that we are required to make an additional transfer pricing adjustment with a wholly owned non-U.S. subsidiary as a result of our acquisition of Avant! in 2002. The IRS has also proposed adjustments to our transfer pricing arrangements with our foreign subsidiaries, deductions for foreign trade income and certain temporary differences. We have agreed to additional taxes of approximately \$20.0 million for these proposed adjustments, which have been fully provided for in prior years. The total adjustments proposed by the IRS, if sustained, would also result in additional state taxes (net of the federal tax benefit for state taxes paid) of approximately \$17.0 million. The IRS imposes interest on any resulting tax deficiencies.

On August 9, 2008, we timely filed a protest with the IRS and will seek resolution of these issues through the Appeals Office of the IRS. We strongly believe that the proposed IRS adjustment and resulting proposed deficiency are inconsistent with applicable tax laws, and that we have meritorious defenses to this proposed adjustment. The RAR is not a final Statutory Notice of Deficiency. We believe we have adequately provided for all potential tax liabilities related to these years. Final resolution of these matters is expected to take several years.

## Liquidity and Capital Resources

Our sources of cash, cash equivalents and short-term investments are funds generated from our business operations and funds that may be drawn down under our credit facility.

The following sections discuss changes in our balance sheet and cash flows, and other commitments on our liquidity and capital resources during fiscal 2008.

#### Cash and cash equivalents and short term investments

	October 31,							
	2008	2007	\$ Change	% Change				
	(dollars in millions)							
Cash and cash equivalents	\$577.6	\$579.3	\$ (1.7)	<(1)%				
Short term investments	373.7	405.1	(31.4)	(8)%				
Total	\$951.3	\$984.4	\$ (33.1)	(3)%				

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During fiscal 2008, our primary sources and uses of cash consisted of (1) cash generated from operating activities of \$331.1 million, (2) proceeds from sales and maturities of investments, net of purchases, of \$25.3 million, (3) net payments related to acquisitions of \$184.7 million, (4) repurchases of common stock of \$220.1 million, (5) purchases of property and equipment of \$38.9 million, and (6) proceeds from issuances of common stock of \$79.3 million.

## Cash flows

				\$	%	\$	%
	Year Ended October 31,			Change	Change	Change	Change
	2008	2007	2006	2007 to	o 2008	2006 to	o 2007
(dollars in millions)							
Cash provided by operations	\$ 331.1	\$ 433.5	\$ 205.9	\$(102.4)	(24)9	% \$ 227.6	111%
Cash used in investing activities	(201.1)	(245.6)	(153.8)	44.5	18%	(91.8)	(60)%
Cash (used in) provided by							
financing activities	(143.8)	56.9	(130.4)	(200.7)	(353)9	% 187.3	144%

#### Cash provided by operating activities.

Cash provided by operations is dependent primarily upon the payment terms of our license agreements. To be classified as upfront revenue, we require that 75% of a term or perpetual license fee be paid within the first year. Conversely, payment terms for TSLs are generally extended and the license fee is typically paid either quarterly or annually in even increments over the term of the license. Accordingly, we generally receive cash from upfront license revenue much sooner than from time-based licenses revenue.

*Fiscal 2007 to fiscal 2008.* Cash from operating activities decreased primarily due to the timing of billings and cash payments from customers compared to fiscal 2007, delivering lower cash inflows during fiscal 2008 and also as a result of a litigation settlement of \$12.5 million received from Magma during fiscal 2007.

*Fiscal 2006 to fiscal 2007.* Cash provided by operating activities increased primarily due to increased collections largely as a result of payments received from a significant customer, a litigation settlement of \$12.5 million received from Magma during fiscal 2007, and decreased commission payments and timing of payments to vendors compared to fiscal 2006.

## Cash used in investing activities.

*Fiscal 2007 to fiscal 2008.* The decrease in cash used in investing activities primarily relates to the sale of marketable securities for our acquisition of Synplicity, and as a result of lower capital expenditures during fiscal 2008 as compared to fiscal 2007.

*Fiscal 2006 to fiscal 2007.* The increase in cash used primarily relates to acquisitions, purchases of marketable securities related to our increased collections and the timing of maturities of marketable securities, and our capital expenditures to support our information technology infrastructure, partially offset by cash received for the sale of land in San Jose, California for \$26.3 million, net of related fees.

Cash (used in) provided by financing activities.

*Fiscal 2007 to fiscal 2008.* The increase in cash used in financing activities primarily relates to larger common stock repurchases under our stock repurchase program and a lower number of employee option exercises compared to fiscal 2007. See Note 7 of *Notes to Consolidated Financial Statements* for details of our stock repurchase program.

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*Fiscal 2006 to fiscal 2007.* The increase in cash provided primarily relates to a higher amount of option exercises by employees and lower stock repurchases under our stock repurchase program compared to fiscal 2006.

We hold our cash, cash equivalents and short-term investments in the United States and in foreign accounts, primarily in Ireland, Bermuda, and Japan. As of October 31, 2008, we held an aggregate of \$501.6 million in cash, cash equivalents and short-term investments in the United States and an aggregate of \$449.7 million in foreign accounts. Funds in foreign accounts are generated from revenue outside North America. At present, such foreign funds are considered to be indefinitely reinvested in foreign countries as described in "Income Taxes" above.

We expect cash provided by operating activities to fluctuate in future periods as a result of a number of factors, including timing of our billings and collections, our operating results, the timing and amount of tax and other liability payments and cash used in any future acquisitions.

Accounts Receivable, net

	Octob	oer 31,						
	2008	2007	\$ Change	% Change				
(dollars in millions)								
	\$147.4	\$123.9	\$ 23.5	19%				

Our accounts receivable and Days Sales Outstanding (DSO) are primarily driven by our billing and collections activities. Our DSO was 38 days at October 31, 2008 and 36 days at October 31, 2007. The increase in DSO along with a slight increase in accounts receivable balance primarily relates to timing of billings to customers that occurred during the year with subsequent payment terms and our collections.

*Net Working Capital.* Working capital is comprised of current assets less current liabilities, as shown on our consolidated balance sheets. As of October 31, 2008, our net working capital was \$413.3 million, compared to \$296.5 million as of October 31, 2007. The increase of \$116.8 million was primarily due to (1) an increase in accounts receivable of \$23.5 million, (2) an increase in income taxes receivable of \$7.3 million, (3) an increase in current deferred income tax asset of \$10.4 million, and (4) a decrease of \$193.1 million primarily due to a reclassification from short-term accrued income taxes to long-term accrued income taxes upon our adoption of FIN 48. This increase was partially offset by (1) a decrease in cash, cash equivalents and short-term investments of \$33.2 million, (2) a decrease in prepaid and other assets of \$13.3 million, (3) an increase in deferred revenue of \$27.4 million, and (4) an increase of \$43.6 million in accounts payable and accrued liabilities.

*Other Commitments* Credit Facility. On October 20, 2006, we entered into a five-year, \$300.0 million senior unsecured revolving credit facility providing for loans to Synopsys and certain of our foreign subsidiaries. The amount of the facility may be increased by up to an additional \$150.0 million through the fourth year of the facility. The facility contains financial covenants requiring us to maintain a minimum leverage ratio and specified levels of cash, as well as other non-financial covenants. The facility terminates on October 20, 2011. Borrowings under the facility bear interest at the greater of the administrative agent's prime rate or the federal funds rate plus 0.50%; however, we have the option to pay interest based on the outstanding amount at Eurodollar rates plus a spread between 0.50% and 0.70% based on a pricing grid tied to a financial covenant. In addition, commitment fees are payable on the facility at rates between 0.125% and 0.175% per year based on a pricing grid tied to a financial covenant. As of October 31, 2008, we had no outstanding borrowings under this credit facility and were in compliance with all covenants.

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#### Other

Our cash equivalent and short-term investment portfolio as of October 31, 2008 consists of investment grade municipal bonds, tax-exempt money market mutual funds and taxable money market mutual funds. We follow an established investment policy and set of guidelines to monitor, manage and limit our exposure to interest rate and credit risk. The policy sets forth credit quality standards and limits our exposure to any one issuer. As a result of current adverse financial market conditions, some financial instruments, such as structured investment vehicles, sub-prime mortgage-backed securities and collateralized debt obligations, may pose risks arising from liquidity and credit concerns. As of October 31, 2008, we had no direct holdings in these categories of investments and our exposure to these financial instruments through our indirect holdings in money market mutual funds was close to 0% of total cash, cash equivalents and short-term investments, which we do not consider to be material. During fiscal 2008 we had no impairment charge associated with our short-term investment portfolio. While we cannot predict future market conditions or market liquidity, we have taken steps, including regularly reviewing our investments and associated risk profiles, which we believe will allow us to effectively manage the risks of our investment portfolio.

We believe that our current cash, cash equivalents, short-term investments, cash generated from operations, and available credit under our credit facility will satisfy our business requirements for at least the next twelve months.

#### **Contractual Obligations and Off-Balance Sheet Arrangements**

The following table summarizes our contractual obligations as of October 31, 2008.

	Total	Fiscal 2009	Fiscal 2010/ Fiscal 2011	Fiscal 2012/ Fiscal 2013	Thereafter	Other
			(in thousands	s)		
Long-Term Obligations(1)	\$ 1,725	\$ 575	\$ 1,150	\$	\$	
Lease Obligations:						
Capital Lease	2,696	1,618	1,078			
Operating Leases(2)	201,757	39,798	65,874	49,573	46,512	
Purchase Obligations(3)	99,531	84,490	15,041			
Long term accrued income						
taxes(4)	152,745					152,745
Total	\$458,454	\$126,481	\$ 83,143	\$ 49,573	\$ 46,512	152,745

(1)

This commitment relates to the fees associated with the revolving credit facility as discussed in Other Commitments above.

(2)

Additional information is provided in Note 6 of Notes to Consolidated Financial Statements.

(3)

Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the ordinary course of business for which we have not received the goods or services as of October 31, 2008. Although open purchase orders are considered enforceable and legally binding, the terms generally allow us the option to cancel, reschedule and adjust our requirements based on our business needs prior to the delivery of goods or performance of services.

(4)

Long term accrued income taxes represent uncertain tax benefits as of October 31, 2008 recorded in accordance with FIN 48. Currently, a reasonably reliable estimate of timing of payments in individual years beyond fiscal 2009 cannot be made due to uncertainties in timing of the commencement and settlement of potential tax audits and controversies.

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In connection with our acquisitions completed prior to October 31, 2008, we may be obligated to pay up to an aggregate of \$2.4 million in cash during the two years subsequent to fiscal 2009 if certain performance and milestone goals are achieved. Because these commitments are contingent on certain performance and milestone goals, these amounts are not reflected in the table above.

The expected timing of payments of the obligations discussed above is estimated based on current information. Timing of payment and actual amounts paid may be different depending on the time of receipt of goods or services or changes to agreed-upon amounts for some obligations. Amounts disclosed as contingent or milestone-based obligations depend on the achievement of the milestones or the occurrence of the contingent events and can vary significantly.

As of October 31, 2008, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a) (4)(ii) of SEC Regulation S-K.

## **Related Party Transactions**

For information regarding related party transactions, see Note 12 of *Notes to Consolidated Financial Statements* which information is included herein.

## Effect of New Accounting Pronouncements

For a description of the effect of new accounting pronouncements on Synopsys, see Note 13 of *Notes to Consolidated Financial Statements* which information is included herein.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

*Interest Rate Risk.* Our exposure to market risk for changes in interest rates relates primarily to our short-term investment portfolio. The primary objective of our investment activities is to preserve the principal while at the same time maximizing yields without significantly increasing the risk. To achieve this objective, we maintain our portfolio of cash equivalents and investments in a mix of tax-exempt and taxable instruments that meet high credit quality standards, as specified in our investment policy. None of our investments are held for trading purposes. Our policy also limits the amount of credit exposure to any one issue, issuer and type of instrument.

The following table presents the carrying value and related weighted-average total return for our investment portfolio as of October 31, 2008:

	Carry	ying Value	Weighted Average Total Return
	(in tl	nousands)	
Money market funds (U.S.)	\$	127,304	2.34%
Cash deposits and money market funds (International)		440,929	1.47%
Short-term investments (U.S.)		373,669	1.87%
	<i>.</i>	0.44.00 <b>.</b>	
Total interest bearing instruments	\$	941,902	1.75%

As of October 31, 2008, the stated maturities of our current short-term investments are \$99.3 million within one year, \$93.4 million within one to five years, \$41.1 million within five to ten years and \$139.8 million after ten years. However, we consider these investments to be short-term in nature because, in accordance with our investment policy, the weighted-average expected duration of our total invested funds does not exceed one year and the investments are available for short-term obligations and other uses including acquisitions. These investments are recorded on the balance sheet at fair market value with unrealized gains or losses reported as a separate component of accumulated other comprehensive income, net of tax.

The following table presents the amounts of our cash equivalents and investments as of October 31, 2008 that are subject to interest rate risk by fiscal year of expected maturity and average interest rates:

		Б.:			
	2009	2010	2011	Total	Fair Value
		(ii	n thousands)		
Cash equivalents (variable rate)	\$568,233			\$568,233	\$568,233
Average interest rate	1.44%				
Short-term investments (variable rate)	\$ 65,620			\$ 65,620	\$ 65,620
Average interest rate	2.53%				
Short-term investments (fixed rate)	\$130,829	\$161,918	\$15,302	\$308,049	\$308,049
Average interest rate	2.80%	2.63%	2.78%		

The following table presents the amounts of our cash equivalents and investments as of October 31, 2007 that are subject to interest rate risk by fiscal year of expected maturity and average interest rates:

	Year Ended October 31,	
	Fair 2008 2009 2010 Total Value (in thousands)	
Cash equivalents (variable rate)	\$554,866 \$554,866 \$554,86	66
Average interest rate	3.12%	
Short-term investments (variable rate)	\$ 80,659 \$ 80,659 \$ 80,65	59
Average interest rate	3.30%	
Cash equivalents (fixed rate)	\$ 4,900 \$ 4,900 \$ 4,90	00
Average interest rate	3.52%	
Short-term investments (fixed rate)	\$149,043 \$132,837 \$42,586 \$324,466 \$324,46	66
Average interest rate	3.53% 3.54% 3.55%	

*Foreign Currency Risk.* We operate internationally and are exposed to potentially adverse movements in currency exchange rates. The functional currency of each of our active foreign subsidiaries is the foreign subsidiary's local currency, except for our principal Irish, Swiss and Hungarian subsidiaries whose functional currencies are the U.S. dollar. We enter into hedges in the form of foreign currency forward contracts to reduce our exposure to foreign currency rate changes on non-functional currency denominated forecasted transactions and balance sheet positions including: (1) certain assets and liabilities, (2) shipments forecasted to occur within approximately one month, (3) future billings and revenue on previously shipped orders, and (4) certain future intercompany invoices denominated in foreign currencies. The foreign currency contracts ranges from one month to 19 months. A description of our accounting for foreign currency contracts is included in Note 2 and Note 5 of *Notes to Consolidated Financial Statements*.

The success of our hedging activities depends upon the accuracy of our estimates of various balances and transactions denominated in non-functional currencies. To the extent our estimates are correct, gains and losses on our foreign currency contracts will be offset by corresponding losses and gains on the underlying transactions. For example, if the Euro were to depreciate by 10% compared to the U.S. dollar prior to the settlement of the Euro forward contracts listed in the table below providing information as of October 31, 2008, the fair value of the contracts would decrease by approximately \$8.9 million, and we would be required to pay approximately \$8.9 million to the counterparty upon contract maturity. At the same time, the U.S. dollar value of our Euro-based expenses would decline,

resulting in a gain and positive cash flow of approximately \$8.9 million that would offset the loss and negative cash flow on the maturing forward contracts.

Net unrealized losses of approximately \$15.9 million and gains of approximately \$1.5 million, net of tax are included in accumulated other comprehensive income (loss) in our consolidated balance sheets as of October 31, 2008 and October 31, 2007, respectively.

If our estimates of our balances and transactions prove inaccurate, we will not be completely hedged, and we will record a gain or loss, depending upon the nature and extent of such inaccuracy.

We do not use foreign currency forward contracts for speculative or trading purposes. We enter into foreign exchange forward contracts with financial institutions and have not experienced nonperformance by counterparties. Further, we anticipate performance by all counterparties to such agreements.

The following table provides information about our foreign currency contracts as of October 31, 2008:

	Notional Amount in U.S. Dollars (in thousands)		Weighted Average Contract Rate
Forward Contract Values:	Ì	,	
Japanese yen	\$	127,189	96.21
Euro		88,839	0.6929
Canadian dollar		36,197	1.10876
India rupee		34,243	47.3567
Chinese renminbi		33,057	6.6224
Taiwan dollar		22,573	31.766
Swedish krona		22,152	7.68652
British pound sterling		19,656	0.56023
Armenian dram		14,020	301.686
Israeli shekel		12,800	3.56338
Switzerland franc		9,944	1.09032
Korean won		7,934	1,249.8
Singapore dollar		6,751	1.44617
Danish krone		1,760	5.1787

\$ 437,115

The following table provides information about our foreign currency contracts as of October 31, 2007:

	Ar	otional nount in 5. Dollars	Weighted Average Contract Rate
	(in t	housands)	
Forward Contract Values:			
Japanese yen	\$	43,489	114.20
Euro		74,959	0.70689
Canadian dollar		40,603	0.97387
India rupee		12,530	39.4193
Chinese renminbi		7,339	7.3975
Taiwan dollar		3,373	32.26
Swedish krona		777	6.39129
British pound sterling		17,794	0.49201
Israeli shekel		2,625	3.9728
Korean won		2,296	908.25
Singapore dollar		1,875	1.44725
	\$	207,660	

*Equity Risk.* Our strategic investment portfolio as of October 31, 2008 consists of approximately \$14.3 million of minority equity investments in publicly traded and privately held companies compared to approximately \$13.6 million as of October 31, 2007. The securities of publicly traded companies are classified as available-for-sale securities accounted for under Statement of Financial Accounting Standards No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and are reported at fair value, with unrealized gains or losses, net of tax, recorded as a component of accumulated other comprehensive loss in stockholders' equity. The cost basis of securities sold is based on the specific identification method. The securities of privately held companies are reported at the lower of cost or fair value. During fiscal 2008 and 2006, we reduced the value of our strategic investment portfolio by \$1.1 million and \$1.3 million, respectively. We did not reduce the value of our strategic investment portfolio during fiscal 2007. None of our investments in our strategic investment portfolio are held for trading purposes.

### Item 8. Financial Statements and Supplementary Data

## **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders Synopsys, Inc.:

We have audited the accompanying consolidated balance sheets of Synopsys, Inc. and subsidiaries as of October 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended October 31, 2008. We also have audited Synopsys, Inc.'s internal control over financial reporting as of October 31, 2008, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Synopsys, Inc.'s management is responsible for these consolidated financial statements, 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 appearing under item 9A(b). Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Synopsys, Inc. and subsidiaries as of October 31, 2008 and 2007, and the results of their operations and their cash flows for each of the years in the three-year period ended October 31, 2008, in conformity with U.S. generally accepted accounting principles. Also



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in our opinion, Synopsys, Inc. maintained, in all material respects, effective internal control over financial reporting as of October 31, 2008, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

As discussed in note 2 to the consolidated financial statements, the Company changed its method of accounting for uncertainty in income taxes in fiscal 2008 and quantifying errors in fiscal 2007 resulting from the adoption of new accounting pronouncements.

/s/ KPMG LLP

Mountain View, California December 19, 2008

## SYNOPSYS, INC.

## CONSOLIDATED BALANCE SHEETS

## (In thousands, except par value amounts)

	October 31,			
	2008	2007		
ASSETS				
Current assets:	¢ 555 (00	<b>*</b> 570 007		
Cash and cash equivalents	\$ 577,632	\$ 579,327		
Short-term investments	373,669	405,126		
Total cash, cash equivalents and short-term investments	951,301	984,453		
Accounts receivable, net	147,365	123,900		
Deferred income taxes	133,609	123,165		
Income taxes receivable	49,859	42,525		
Prepaid expenses and other assets	40,156	53,496		
Total current assets	1,322,290	1,327,539		
Property and equipment, net	145,087	131,866		
Goodwill	899,640	767,087		
Intangible assets, net	114,760	78,792		
Long-term deferred income taxes	177,386	216,642		
Other assets	83,315	95,411		
Total assets	\$2,742,478	\$2,617,337		
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable and accrued liabilities	\$ 289,769	\$ 246,209		
Accrued income taxes	14,496	207,572		
Deferred revenue	604,718	577,295		
Total current liabilities	908,983	1,031,076		
Long term accrued income taxes	152,745			
Deferred compensation and other liabilities	76,970	84,648		
Long-term deferred revenue	75,409	65,220		
Total liabilities	1,214,107	1,180,944		
Stockholders' equity:	, ,	,,-		
Preferred Stock, \$0.01 par value: 2,000 shares authorized; none				
outstanding				
Common Stock, \$0.01 par value: 400,000 shares authorized; 141,786				
and 146,365 shares outstanding, respectively	1,418	1,464		
Capital in excess of par value	1,471,031	1,401,965		
Retained earnings	434,057	263,977		
Treasury stock, at cost: 15,485 and 10,867 shares, respectively	(342,856)	(234,918)		
Accumulated other comprehensive income (loss)	(35,279)	3,905		
Total stockholders' equity	1,528,371	1,436,393		
Total liabilities and stockholders' equity	\$2,742,478	\$2,617,337		

See accompanying notes to consolidated financial statements.

## SYNOPSYS, INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS

## (In thousands, except per share amounts)

	Year Ended October 31,					
	2008	2007	2006			
Revenue:						
Time-based license	\$1,125,845	\$1,004,026	\$ 874,862			
Upfront license	71,383	67,524	63,050			
Maintenance and service	139,723	140,919	157,648			
Total revenue	1,336,951	1,212,469	1,095,560			
Cost of revenue:						
License	171,974	146,420	129,052			
Maintenance and service	63,596	64,358	65,970			
Amortization of intangible assets	23,326	23,487	28,505			
Total cost of revenue	258,896	234,265	223,527			
Gross margin	1,078,055	978,204	872,033			
Operating expenses:						
Research and development	394,747	379,221	370,629			
Sales and marketing	334,779	349,395	330,361			
General and administrative	103,852	101,735	112,873			
In-process research and development	4,800	3,200	800			
Amortization of intangible assets	20,765	26,609	27,938			
Total operating expenses	858,943	860,160	842,601			
Operating income	219,112	118,044	29,432			
Other (loss) income, net	(156)		14,287			
Income before provision for income taxes	218,956	165,799	43,719			
Provision for income taxes	28,978	35,308	18,977			
Net income	\$ 189,978	\$ 130,491	\$ 24,742			
Net income per share:						
Basic	\$ 1.33	\$ 0.91	\$ 0.17			
Diluted	\$ 1.29	\$ 0.87	\$ 0.17			
Shares used in computing per share amounts:						
Basic	143,258	143,953	142,830			
Diluted	147,672	149,716	144,728			

See accompanying notes to consolidated financial statements.

## SYNOPSYS, INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME

## (In thousands)

	Common	n Stock	Capital in Excess of Par	Retained	Treasury	Deferred Stock	Accumulated Other Comprehensive	
	Shares	Amount	Value	Earnings	Stock	Compensation	Income (Loss)	Total
Balance at October 31, 2005	145,897	\$ 1,459	\$1,263,258	\$162,878	\$(199,482)	\$ (1,475)	\$ (16,001)	51,210,637
Components of comprehensive income:								
Net income				24,742				24,742
Unrealized gain on investments, net of tax of \$(113)							192	192
Deferred loss on cash flow hedges, net of tax of \$1,174							(2,261)	(2,261)
Reclassification adjustment on deferred losses of cash flow hedges, net of tax of \$(641)							791	791
Foreign currency translation adjustment							4,798	4,798
Other comprehensive income								3,520
Total comprehensive income								28,262
Purchases of treasury stock	(10,029)	( )			(199,992)			(199,992)
Common stock issued	4,700	47	(325)	(16,877)	86,721			69,566