SYNOPSYS INC Form 10-K January 11, 2007

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549		
FORM 10-K		
ANNUAL REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934		
(Mark One)		
x ANNUAL REPORT PURSUANT TO	SECTION 13 OR 15(d) OF THE	E SECURITIES EXCHANGE ACT OF 1934
For the year ended October 31, 2006		
OR		
o TRANSITION REPORT PURSUAN	T TO SECTION 13 OR 15(d) C	F 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 jurisdi incorporation or organ	ction of (I.R	6-1546236 .S. Employer cification No.)
700 East Middlefield Road, Mountain View, California 94043	3	
(Address of principal executive offices, including zip code)		
(650) 584-5000		
(Registrant s telephone number, including area code)		
Securities R	egistered Pursuant to Section 12(b) of	of the Act:
Title of Each Class  Common Stock, \$0.01 par value Preferred Share Purchase Rights	Name of Each E	schange on Which Registered The Nasdaq Stock Market, Inc. The Nasdaq Stock Market, Inc.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  $x \, \text{No o}$ 

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 x							
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 x No o							
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o							
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):							
Large accelerated filer x  Accelerated filer o  Non-accelerated filer o							
Indicate by check mark whether the registrant is a shell c	company (as defined in Rule 12b-2 of the Exch	nange Act). Yes o No x					
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 \$2,676,166,223. Aggregate market value excludes an aggregate of 21,241,457 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 31, 2006, 144,013,064 shares of the Registrant s Common Stock, \$0.01 par value, were outstanding.							
DOCUMENTS INCORPORATED BY REFERENCE							

None.

## SYNOPSYS, INC. ANNUAL REPORT ON FORM 10-K Year ended October 31, 2006

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#### PART I

This Annual Report on Form 10-K, particularly in 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 seasonality; expectations regarding the likely outcome of the Internal Revenue Service s proposed net tax deficiencies for fiscal years 2000 and 2001 or 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, especially those contained in Item 1A of this Form 10-K. The words anticipate, expect, intend, believe, continue, or the negatives of these terms, or other could, would, comparable terminology and similar expressions identify these 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.

#### 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) 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 throughout North America, Europe, Japan and Asia.

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). 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 chip 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 Systems-on-a-Chip (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 unprecedented business challenges stemming from the semiconductor downturn in 2000-2002, increased globalization leading customers to source their products in lower cost areas, and consumer demand for cheaper and more advanced products.

#### 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.* In system design, the designer describes the chip s desired functions in very basic terms using a specialized high-level computer language, typically C++ or System C. This phase yields a relatively high level behavioral model of the chip.

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 Verilog or VHDL.

*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).

*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.

Design for 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 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 design for manufacturing tools and 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.

Finally, 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.

#### **Products and Services**

Our products and services are managed by our six principal business units: the Implementation, Verification, Silicon Engineering, Analog/Mixed-Signal, Systems and IP and Global Technical Services

groups. Our products are divided into five common groupings, or platforms: Galaxy<sup>TM</sup> Design Platform, Discovery<sup>TM</sup> Verification Platform, Intellectual Property, Design-for-Manufacturing 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.

The following are the Galaxy Design platform s principal products and solutions:

- *IC Compiler* physical design solution, which unifies previously separate IC design operations by providing concurrent physical synthesis, clock-tree synthesis, routing, yield optimization and sign-off correlation and delivering significant improvements in design performance and productivity.
- *Design Compiler*® logic synthesis product used by a broad range of IC design companies to optimize their designs for performance and area.
- *Physical Compiler*® physical synthesis product, which unites logic synthesis and placement functionality and addresses critical timing problems encountered in designing advanced ICs and SoCs.
- $Astro^{TM}$  advanced physical design system, which enables optimization, placement and routing while concurrently accounting for physical effects.
- *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.
- Formality® formal verification sign-off solution, which compares two versions of a design to determine if they are equivalent.
- *Star-RCXT*<sup>TM</sup> extraction solution for analyzing IC layout data and determining key electrical characteristics of a chip, such as capacitance and resistance.
- *TetraMax*® automatic test pattern generation (ATPG) solution generates high quality tests to identify defects following the IC manufacturing process.
- *Hercules*<sup>TM</sup> 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 following are the Discovery Verification platform s principal products and solutions:

- *VCS*® comprehensive RTL verification solution, which includes technologies that support model development, testbench creation, coverage feedback and debugging techniques.
- *Vera*® testbench generator, which automates the creation of testbenches, which are custom models that provide simulation inputs and respond to simulated outputs from the design during verification. Automating this process significantly improves verification quality.
- *Verification IP* reusable IP designed to test specific functions and adherence to industry protocols in an IC design, which we believe is becoming increasingly important to more quickly achieving verification sign-off.
- *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.
- Discovery AMS mixed-signal verification solution which is based on the VCS, NanoSim and HSPICE simulators.

#### Intellectual Property

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 library of verification IP for the most 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.

In addition, Synopsys now offers system-level products that permit designers to begin embedded software development earlier in the hardware design process, helping speed product development.

#### Design-for-Manufacturing

Our design for manufacturing (DFM) 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.
- *Phase Shift Masking Technologies* consist of mask design techniques that use optical interference to improve depth-of-field and resolution in subwavelength photolithography for designs at 90 nanometers and below.
- SiVL® (Silicon versus Layout) layout verification product that verifies the layout of a subwavelength IC against the silicon it is intended to produce by simulating lithographic process effects, including optical, resist and etch 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 and Test Chip products, from our acquisition of HPL Technologies, Inc., which allow access to fab defectivity and metrology data to better control random as well as systematic defects by addressing them at the design stage. This capability helps facilitate a more seamless progression of designs into manufacturing.

In addition, during fiscal 2006, Synopsys expanded its DFM offerings by acquiring SIGMA-C Software AG, a Munich-based company providing simulation software that allows semiconductor manufacturers and their suppliers to develop and optimize process sequences for optical lithography, e-beam lithography and next-generation lithography technologies.

#### **Professional Services**

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.

#### **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- 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.

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. 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, improve interoperability of tools from different vendors, ensure connectivity and interoperability of intellectual property (IP) building blocks, and solve design problems. 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 many standards, including the most commonly used hardware description languages, VHDL, Verilog HDL, SystemVerilog and SystemC. Our products utilize numerous industry standard data formats and interfaces for the exchange of data among our tools, other EDA vendor s 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.

Synopsys is a member of more than 30 industry standards organizations including: Design and Reuse, Fabless Semiconductor Association, European Electronic Chips and Systems design Initiative, Gigabit Ethernet Consortia, Mobile Industry Processor Interface, OpenAccess Coalition, Open SystemC Initiative, and Virtual Socket Interface Alliance. In addition, we are a board member and/or strongly active participant in influential EDA standards and interoperability organizations including: Accellera, the Institute of Electrical and Electronics Engineers, Power.org, Structure for Packaging, Integrating and Re-using IP within Tool-flows, and the Silicon Integration Initiative.

Synopsys, other EDA companies, and EDA customers use these standards to facilitate interoperability of their tools. The standards offered through our TAP-in program include our Liberty<sup>TM</sup> format for library modeling, SDC for design constraints, SAIF for switching activity, the OpenVera® language for hardware verification, and Open MAST for electromechanical design modeling. Synopsys common database, Milkyway, is available for tool integration by EDA vendors through our MAP-insm program. Synopsys manages changes and enhancements that come from the community of licensees for all TAP-in and MAP-in standards, with Liberty s change management being operated within the Silicon Integration Initiative. Finally, Synopsys provides access to our tools for other EDA vendors to help identify, facilitate, and develop optimal flows and solutions for our mutual customers through our in-Sync program.

Synopsys products are written mainly in the C and C++ languages and utilize software standards for graphical user interfaces. Our products generally run under the industry s most popular operating systems, Sun Solaris, RedHat Enterprise Linux, and SUSE Linux Enterprise, and on the most widely-used microprocessors including Sun SPARC, Intel Xeon64, and AMD AMD64.

#### 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 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 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 and the United Kingdom. Our foreign headquarters is located in Dublin, Ireland. Our offices are further described under Part I, Item 2. *Properties*.

In fiscal 2006, 2005 and 2004, an aggregate of 49%, 49% and 45%, 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 incorporated by reference here. Information relating to risks associated with foreign operations is described in Part I, Item 1A. *Risk Factors- Stagnation of foreign economies, foreign exchange rate fluctuations and the increasingly global nature of our operations could adversely affect our performance* and is incorporated by reference here.

Historically, our orders and revenue have been lowest in our first quarter and highest in our fourth quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year, although the timing of major license renewals can alter this trend. Under our previous license model, revenue seasonality resulted principally from the decline in the amount of upfront orders from the fourth quarter of one fiscal year to the first quarter of the next fiscal year. However, as a result of the shift in our license model, as more fully described in Part II, Item 7. *Management s Discussion and Analysis of Financial Condition and Results of Operations*, we experienced significantly less revenue seasonality during fiscal 2005 and 2006 and we expect revenue seasonality to be minimal in the foreseeable future, although orders seasonality may continue.

Synopsys aggregate backlog was approximately \$2.01 billion on October 31, 2006, representing a 4% increase from backlog of \$1.92 billion on October 31, 2005. Aggregate backlog includes deferred revenue, operational backlog and financial backlog. Deferred revenue represents that portion of orders for software products, license maintenance and other services which have been delivered and billed to the customer but on which the revenue has not yet been recognized. Operational backlog consists of orders for software products and maintenance that have not been shipped and orders for consulting services that have not yet been performed and accepted. Financial backlog consists of future installments not yet due and payable under existing time-based licenses and maintenance contracts.

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The following table summarizes the revenue attributable to our five product groups 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 9%, 14% and 16% of our total revenue in fiscal 2006, 2005 and 2004, respectively, to the products to which those support services related.

	FY 2006	FY 2005	FY 2004
Galaxy Design Platform	52 %	56 %	62 %
Discovery Verification Platform	24 %	22 %	21 %
IP .	8 %	7 %	6 %
Design for Manufacturing	11 %	10 %	7 %
Professional Services and Other	5 %	5 %	4 %
Total	100 %	100 %	100 %

Revenue derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 11%, 13% and 11% of our total revenue for the fiscal 2006, 2005 and 2004, respectively.

#### **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 design for manufacturing and IP product offerings. Research and development on existing and new products is primarily conducted within each product group. In addition, an Advanced Technology Group within Synopsys Silicon Engineering Group explores new technologies and maintains strong research relationships outside Synopsys with both industry and academia.

During fiscal 2006, 2005 and 2004, research and development expenses, excluding capitalized software development costs, were \$370.6 million, \$320.9 million and \$288.8 million, respectively. Synopsys capitalized software development costs were approximately \$3.5 million, \$3.0 million, and \$2.7 million in fiscal 2006, 2005 and 2004, respectively.

#### 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), time-to-results, post-sale support, interoperability with our own and other vendors—products, price and payment terms.

Our competitors include companies that offer a broad range of products and services, such as Cadence Design Systems, Inc. and Mentor Graphics Corporation, and companies that offer products focused on one or more discrete phases of the IC design process, such as Magma Design Automation, Inc. In recent years, we have increasingly competed on the basis of payment terms and price. In certain situations, in order to win business we must offer substantial discounts on our products due to competitive factors. In other situations, we may lose potential business to a competitor offering a lower price.

## **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 certain 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, including 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. 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 certain 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.

Under our customer agreements and other license agreements, in many cases 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 pursue this defense.

#### **Employees**

As of October 31, 2006, Synopsys had 5,130 employees, with 2,842 based in North America and 2,288 based outside of North America.

#### **Acquisitions in Fiscal 2006**

For information about acquisitions we completed during fiscal 2006, 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 are incorporated by reference here.

#### Item 1A. Risk Factors

Weakness, budgetary caution or consolidation in the semiconductor and electronics industries may continue to negatively impact our business.

In recent years, we believe that EDA industry growth has been adversely affected by many factors, including ongoing efforts by semiconductor companies to control their spending, uncertainty regarding the long-term growth rate of the semiconductor industry, excess EDA tool capacity of some of our customers and increased competition in the EDA industry itself causing pricing pressure on EDA vendors. If these factors persist or additional semiconductor industry growth does not occur (or if we do not benefit from any such increases), our business, operating results and financial condition will be materially and adversely affected.

We also believe that, over the long term, growth in EDA spending will continue to depend on growth in semiconductor R&D spending and continued growth in the overall semiconductor market. However, we cannot predict the timing or magnitude of growth in semiconductor revenues, R&D spending or spending on EDA products, nor whether we will benefit from any of these increases should they occur. For example, although the semiconductor industry grew by 28% in 2004 and 7% in 2005, EDA industry revenue growth during this period was below these levels.

Competition in the EDA industry may have a material adverse effect on our business and financial results.

We compete with other EDA vendors that offer a broad range of products and services, primarily Cadence Design Systems, Inc. and Mentor Graphics Corporation and with other EDA vendors that offer products focused on one or more discrete phases of the IC design process, such as Magma Design Automation, Inc. We also compete with customers internally developed design tools and capabilities. If we fail to compete effectively, our business will be materially and adversely affected. We compete principally on technology leadership, product quality and features (including ease-of use), time-to-results, post-sale support, interoperability with our own and other vendors products, price and payment terms.

Additional competitive challenges include the following:

- Price continues to be a competitive factor. We believe that some EDA vendors are increasingly offering discounts, which could be significant. If we are unable to match a competitor s pricing for a particular solution, we may lose business, which could have a material adverse effect on our financial condition and results of operations, particularly if the customer chooses to consolidate all or a substantial portion of their other EDA purchase with the competitor.
- Technology in the EDA industry evolves rapidly. Accordingly, we must correctly anticipate and lead critical developments, innovate rapidly and efficiently, improve our existing products, and successfully develop or acquire new products. If we fail to do so, our business will be materially and adversely affected.
- To compete effectively, we believe 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 further development of our Galaxy Design Platform, integration of our Discovery Verification Platform and enhancement of its System Verilog and other advanced features and development of our Design for Manufacturing and IP portfolios. We can provide no assurance that our customers will find these tool and IP configurations more attractive than our competitors offerings or that our efforts to balance the interests of integration versus individual product performance will be successful.
- Payment terms are also an important competitive factor and are aggressively negotiated by our customers.

  During the second half of fiscal 2003 and continuing through 2006, payment terms on time-based licenses lengthened compared to prior periods, negatively affecting our cash flow from

operations. Longer payment terms could continue in the future, which would negatively affect our future operating cash flow.

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 complexity of SoCs and ICs, and customers concerns about managing cost and risk have also led to the following potentially long-term negative trends:

- The number of IC design starts has remained flat during the last three 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, 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, or using Field Programmable Gate Arrays (FPGAs), an alternative chip technology.

All of these trends, if sustained, could have a material adverse effect on the EDA industry, including the demand for our products and services, which in turn would materially and adversely affect 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.

For example, in September 2006, the SEC issued Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, (SAB 108). SAB 108 addresses the process and diversity in practice of quantifying misstatements and provides interpretive guidance on the consideration of the effects of prior year misstatements in quantifying current year misstatements for the purpose of a materiality assessment. The SEC staff believes that registrants should quantify errors using both a balance sheet (iron curtain) and an income statement (rollover) approach and evaluate whether either approach results in quantifying a misstatement that, when all relevant quantitative and qualitative factors are considered, is material. In the year of adoption, SAB 108 allows a one-time cumulative effect transition adjustment for errors that were not previously deemed material, but are material under the guidance in SAB 108. The guidance in SAB 108 must be applied to annual financial statements for fiscal years ending after November 15, 2006. Synopsys will be required to adopt the provisions of SAB 108 in fiscal 2007. Synopsys is currently evaluating the requirements of SAB 108 and the potential impact upon adoption. Historically, Synopsys has evaluated uncorrected differences utilizing the rollover approach. Although Synopsys believes its prior period assessments of uncorrected differences utilizing the rollover approach and the conclusions reached regarding its quantitative and qualitative assessments of such uncorrected differences were appropriate, Synopsys expects that, due to the analysis required in SAB 108, certain historical uncorrected differences

during fiscal 1999 through fiscal 2003 related to share-based compensation and fixed assets, will be corrected upon adoption and reflected in the opening retained earnings balance for fiscal 2007. There can be no assurance that the SEC will not disagree with our conclusions.

Synopsys has not yet completed its analysis of SAB 108, however, it estimates that the expected net reduction to its opening retained earnings balance for fiscal 2007 will be approximately \$10 to \$12 million. Synopsys is continuing to evaluate the impact of adopting SAB 108 and, as a result, the actual change to opening retained earnings balance for fiscal 2007 could be different than the estimate.

In addition, effective in the first quarter of fiscal 2006, Synopsys was required to adopt Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, (SFAS123(R)), which requires the measurement of all share-based compensation to employees, including grants of employee stock options, using a fair-value-based method and the recording of such expense in our consolidated statements of operations. The adoption of SFAS 123(R) had, and is expected to continue to have, a material effect on our reported financial 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 of this examination could have a material adverse effect on our results of operations and financial condition.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions and to review or audit by IRS and state, local and foreign tax authorities. In connection with an IRS audit of our United States federal income tax returns for fiscal years 2000 and 2001, on June 8, 2005, we received a Revenue Agent s Report in which the IRS proposed to assess a net tax deficiency for fiscal years 2000 and 2001 of approximately \$476.8 million, plus interest. Interest accrues on the amount of any deficiency finally determined until paid, and compounds daily at the federal underpayment rate, which adjusts quarterly. This proposed adjustment primarily relates to transfer pricing transactions between Synopsys and a wholly-owned foreign subsidiary. We have filed a protest to the proposed deficiency with the IRS and the matter is currently under appeal with the IRS. We expect to begin the appeals process during 2007. However, final resolution of this matter could take a considerable time, possibly years.

We strongly believe the proposed IRS adjustments and resulting proposed deficiency are inconsistent with applicable tax laws, and that we thus have meritorious defenses to these proposals. Accordingly, we will continue to challenge these proposed adjustments vigorously. While we believe the IRS asserted adjustments are not supported by applicable law, we believe it is probable we will be required to make additional payments in order to resolve this matter. However, based on our analysis to date, we believe we have adequately provided for this matter. If we determine our provision for this matter to be inadequate or if we are required to pay a significant amount of additional U.S. taxes and applicable interest in excess of our provision for this matter, our results of operations and financial condition could be materially and adversely affected.

Unfavorable tax law changes, an unfavorable government review of our tax returns or changes in our geographical earnings mix 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.

In addition, our tax filings are subject to review or audit by the Internal Revenue Service 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. We are also undergoing an audit of our United States federal

income tax returns for fiscal years 2002 through 2004. Although we believe our tax estimates are reasonable, we can provide no assurance that any final determination in the audit will not be materially different than the treatment reflected in our historical income tax provisions and accruals. If additional taxes are assessed as a result of an audit, there could be a material adverse effect on our income tax provision and net income in the period or periods for which that determination is made.

Finally, we have large operations both in the United States and in multiple foreign jurisdictions with a wide range of statutory tax rates. In addition, certain foreign operations are subject to temporary favorable foreign tax rates. Therefore, any changes in our geographical earning mix in various tax jurisdictions and expiration of foreign tax holidays could materially increase our effective tax rate.

Our revenue and earnings fluctuate, which could cause our financial results to not meet expectations and our stock price to decline.

Many factors affect our revenue and earnings, including customer demand, license mix, the timing of revenue recognition on products and services sold and committed expense levels, making it difficult to predict revenue and earnings for any given fiscal period. Accordingly, stockholders should not view our historical results as necessarily indicative of our future performance. If our financial results or targets do not meet investor and analyst expectations, our stock price could 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:

- 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 licenses. The amount of orders received and changes in the mix due to factors such as the level of overall license orders, customer demand, preferred customer payment terms and requested customer ship dates could have a material adverse effect on our revenue and earnings. For example, if we ship more upfront licenses 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 upfront licenses 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 time-based license orders 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 adversely affect our business.
- The market for EDA products is dynamic and depends on a number of factors including consumer demand for our customers products, customer R&D and EDA tool 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 customer s 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 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, 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 upfront and time-based 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 proportion 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 upfront order, could have a material adverse effect on our revenue and/or earnings for that quarter.
- 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 software 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 failure to meet the semiconductor industry s demands for advancing EDA technology and continued cost reductions may adversely affect 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, 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, while also striving to reduce their overall costs and our own operating costs. Failure to manage these conflicting demands successfully would materially and adversely affect our financial condition and results of operations.

Customer payment defaults or related issues could adversely affect our financial condition and results of operations.

Our backlog consists principally of customer payment obligations not yet due that are attributable to software we have already delivered. These customer obligations are typically not cancelable, but will not yield the expected revenue and cash flow if the customer defaults or declares bankruptcy and fails to pay amounts owed. In these cases, we will generally take legal action to recover 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, any material payment default by our customers or significant reductions in existing contractual commitments would have a material adverse effect on our financial condition and results of operations.

Businesses we have acquired or that we may acquire in the future may not perform as we project.

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.

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 our company;
- Failure to realize expected synergies or cost savings;
- Regulatory delays;
- Drain on management time for acquisition-related activities;
- Assumption of unknown liabilities; 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, we can provide no assurance that any acquisition will positively affect our future performance. Furthermore, if we later determine we cannot use or sell an acquired product or technology, we could be required to write down the goodwill and intangible assets associated with the product or technology; any such write-downs could have a material adverse effect on our results of operations.

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

During each of fiscal 2006 and 2005, we derived 49% of our revenue from outside the United States; going forward, we expect our overall orders and revenue targets will continue to depend on substantial contributions from 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 stagnation of foreign economies 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 certain foreign currency exposures of our business, there can be no assurance our hedging activities will 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 locally 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. The failure to effectively manage our global operations would have a material adverse effect on our business and results of operations.

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 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. In addition, we are currently in patent litigation with Magma Design, Inc., one of our competitors. We believe these claims are without merit and will continue to vigorously pursue them.

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, 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 materially and adversely affect our business, results of operations and financial condition.

A failure to protect our proprietary technology would have a material adverse effect on our business, results of operations and financial condition.

Our success depends in part upon protecting our proprietary technology. To protect this technology, we rely on agreements with customers, employees and others and on intellectual property laws worldwide. We can provide no assurance that these agreements will not be breached, that we would have adequate remedies for any breach or that our trade secrets will not otherwise become known or be independently developed by competitors. Moreover, certain foreign countries do not currently provide effective legal protection for intellectual property; our ability to prevent the unauthorized use of our products in those countries is therefore limited. We have a policy of aggressively pursuing action against companies or individuals that wrongfully appropriate or use our products and technologies. For example, we are pursuing anti-piracy cases against several companies located in China. However, there can be no assurance that these actions will be successful. 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 certain jurisdictions, our business, financial condition and results of operations would be materially and adversely affected. In addition, intellectual property litigation is lengthy, expensive and uncertain and legal fees related to such litigation 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 have only recently been enacted, and 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 auditor attestation of that assessment 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 our auditors—attestation could have a material adverse effect on our stock price.

A failure to timely recruit and retain key employees or for any reorganizations to be effective would have a material adverse effect on our business.

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 have a material adverse effect on our business, results of operations and financial condition.

From time to time, we may reorganize our operations for a number of reasons, including to better address customer needs, improve operational efficiency and reduce expenses. While we undertake any such reorganization with the expectation that it will result in improve performance, there can be no assurance that a reorganization will in fact improve our operations or that it will not lead to the loss of key employees.

We issue stock options and maintain employee stock purchase plans as a key component of our overall compensation. There is growing pressure on public companies from stockholders, who must approve any increases in our stock option pool, generally to reduce our overhang or amount of outstanding and unexercised stock options. In addition, our adoption of new accounting rules that require us to recognize on our income statement compensation expense from employee stock options and our employee stock purchase plan may increase pressure to limit future option grants. These factors may make it more difficult for Synopsys to grant attractive equity-based packages in the future, which could adversely impact our ability to attract and retain key employees.

Product errors or defects could expose us to liability and harm our reputation.

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, results of operations and financial condition.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

#### **United States Facilities**

Synopsys 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. Synopsys occupies approximately 200,000 square feet of space in two adjacent buildings in Sunnyvale, California under lease through October 2012, and approximately 72,000 square feet of space in a third building in Sunnyvale under lease through April 2012. We use these buildings for administrative, marketing, research and development, 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. 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. This facility is leased through January 2009.

Synopsys owns a third building in Sunnyvale, California with approximately 120,000 square feet, which is leased to a third party through April 2009. Synopsys also owns 34 acres of undeveloped land in San Jose, California and 13 acres of undeveloped land in Marlboro, Massachusetts. Synopsys has entered into an agreement to sell the San Jose property. See Note 15 of *Notes to Consolidated Financial Statements*.

Synopsys currently leases 20 other offices throughout the United States, primarily for sales and support activities.

#### **International Facilities**

Synopsys leases approximately 45,000 square feet in Dublin, Ireland for its foreign headquarters and for research and development purposes. This space is leased through April 2026. In addition, Synopsys leases foreign sales and service offices in Canada, Denmark, Finland, France, Germany, Hong Kong, India, Israel, Italy, Japan, the Netherlands, the People s Republic of China, Singapore, South Korea, Sweden, Taiwan and the United Kingdom. We also lease research and development facilities in Armenia, Canada, Chile, France, Germany, India, the Netherlands, the People s Republic of China, Russia, Scotland, South Korea, Switzerland, Taiwan 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

Synopsys v. Magma Design Automation, Inc.

In September 2004, Synopsys filed suit against Magma Design Automation, Inc. (Magma) in U.S. District Court for the Northern District of California alleging infringement by Magma of three patents. In April 2006, the parties proceeded to trial on the issue of ownership of these patents (the Ownership Trial). As the ruling from the Ownership Trial remains pending, in December 2006 Synopsys filed a motion for a preliminary injunction to require Magma to withdraw its claim of ownership on the patents considered during the Ownership Trial. In January 2007, the court granted Synopsys motion and directed Magma to transfer record title to Synopsys. The court has not yet issued a final ruling on the question of ownership. A second trial (the Infringement Trial) will be required in order to determine the relief that should issue in connection with any infringement of the Synopsys patents; however, the court has not yet scheduled the Infringement Trial.

In September 2005, Synopsys filed two additional actions against Magma. One of the actions, filed in the Superior Court of California and later removed to the U.S. District Court for the Northern District of California, alleges that Magma engaged in actions that constitute common law and statutory unfair business practices. In that action Magma filed a motion to dismiss, which remains under submission. In the remaining action Synopsys asserted three patents against Magma in U.S. District Court for the District of Delaware. In its answer and counterclaims, Magma asserted patents against Synopsys, and alleged that Synopsys has engaged in various practices that constitute antitrust violations and has violated various state laws. Magma seeks declaratory relief that the patents asserted by Synopsys are invalid or unenforceable. Magma also seeks an injunction prohibiting Synopsys from infringing the patents it has asserted, and seeks unspecified damages. Synopsys has filed an answer denying Magma s allegations and asserting that the Magma patents at issue are either unenforceable or invalid. A trial on these issues has been scheduled for June 2007.

Synopsys believes Magma s claims in all actions are without merit and is vigorously contesting them.

IRS Revenue Agent s Report

On June 8, 2005, we received a Revenue Agent s Report (RAR) in which the Internal Revenue Service (IRS) proposed to assess a net tax deficiency for fiscal years 2000 and 2001 of approximately \$476.8 million, plus interest. Interest accrues on the amount of any deficiency finally determined until paid, and compounds daily at the federal underpayment rate, which adjusts quarterly.

This proposed adjustment primarily relates to transfer pricing transactions between Synopsys and a wholly-owned foreign subsidiary. The proposed adjustment for fiscal years 2000 and 2001 is the total amount relating to these transactions asserted under the IRS theories.

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. We expect to begin the appeals process during 2007. However, final resolution of this matter could take a considerable time, possibly years. We strongly believe the proposed IRS adjustments and resulting proposed deficiency are inconsistent with applicable tax laws, and that we thus have meritorious defenses to these proposals. Accordingly, we will continue to challenge these proposed adjustments vigorously. While we believe the IRS asserted adjustments are not supported by applicable law, we believe it is probable we will be required to make additional payments in order to resolve this matter. However, based on our analysis to date, we believe we have adequately provided for this matter. If we determine our provision for this matter to be inadequate or are required to pay a significant amount of additional U.S. taxes and applicable interest in excess of our provision for this matter, our results of operations and financial condition could be materially and adversely affected.

#### 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 2006.

#### **Executive Officers of the Registrant**

The executive officers of Synopsys and their ages as of December 31, 2006, were:

Name	Age	Position
Aart J. de Geus	52	Chief Executive Officer and Chairman of the Board of Directors
Chi-Foon Chan	57	President, Chief Operating Officer
Brian M. Beattie	53	Chief Financial Officer
John Chilton	49	Senior Vice President, Marketing and Business Development Group
Janet S. Collinson	46	Senior Vice President, Human Resources and Facilities
Antun Domic	55	Senior Vice President and General Manager, Implementation Group
Wolfgang Fichtner	55	Senior Vice President and General Manager, Silicon Engineering Group
Manoj Gandhi	46	Senior Vice President and General Manager, Verification Group
Deirdre Hanford	44	Senior Vice President, Global Technical Services
Paul Lo	47	Senior Vice President and General Manager, Analog/Mixed Signal Group
Joseph W. Logan	47	Senior Vice President, Worldwide Sales
Brian E. Cabrera	41	Vice President, General Counsel and Secretary
Joachim Kunkel	48	Vice President and General Manager, Systems and IP Group

*Dr. Aart J. de Geus* co-founded Synopsys and currently serves as Chairman of the Board of Directors and Chief Executive Officer. Since the inception of Synopsys in December 1986, he has held a variety of positions, including Senior Vice President of Engineering and Senior Vice President of Marketing. From 1986 to 1992, Dr. de Geus served as Chairman of the Board. He served as President from 1992 to 1998. Dr. de Geus has served as Chief Executive Officer since January 1994 and has held the additional title of Chairman of the Board since February 1998. He has served as a Director since 1986. 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.

*Dr. 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 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. Prior to that time, he was Executive Vice President of Finance and Administration and Chief Financial Officer of SupportSoft, Inc., a provider of software and services that automate the resolution of technical problems, since October 1999. 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 MBA from Concordia University in Montreal.

John Chilton has served as Senior Vice President, Marketing and Business Development Group since September 2006. Prior to that time, he was Senior Vice President and General Manager of the Solutions Group of Synopsys 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 received 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, Human Resources and Facilities since August 2003. From September 1999 to August 2003 she was Vice President, Real Estate and Facilities. Prior to that time she served as Director of Facilities from January 1997 to September 1999. Ms. Collinson received a B.S. in Human Resources from California State University, Fresno.

*Dr. Antun Domic* has served as Senior Vice President and General Manager of the Implementation Group since August 2003. Prior to that, Dr. Domic 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 has 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.

Dr. Wolfgang Fichmer has served as Senior Vice President and General Manager of the Silicon Engineering Group since December 2006. Prior to that time, Dr. Fichtner was Vice President and General Manager, TCAD products for Synopsys, from November 2004 through December 2006. He was President and Chief Executive Officer of ISE Integrated Systems Engineering AG, a Swiss provider of TCAD products which he founded, from 1993 until November 2004, when the company was acquired by Synopsys. From October 1999 to October 2004, he was Chairman of the Electrical Engineering Department at the Swiss Federal Institute of Technology (ETH) and has served as a professor of ETH and head of its Integrated Systems Laboratory since 1985. From 1978 until 1985, Dr. Fichtner worked in various positions at Bell Laboratories, an electronics research concern. Dr. Fichtner holds an M.S. in Physics and a Ph.D. in Electrical Engineering from the Technical University of Vienna, Austria.

Manoj Gandhi has served as Senior Vice President and General Manager, Verification Group since August 2000. Prior to that he was Vice President and General Manager of the Verification Tools Group from July 1999 to August 2000. Prior to that time, he was Vice President of Engineering from December 1997 until July 1999. He holds a B.S. 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, Global Technical Services since September 2006. Prior to that time, she was Senior Vice President of Worldwide Applications Services from December 2002 to September 2006 and Senior Vice President, Business and Market Development from September 1999 to December 2002. From October 1998 until September 1999, she served as Vice President, Sales for Professional Services and prior to that as Vice President, Corporate Applications Engineering from April 1996 to September 1999. Ms. Hanford received a B.S.E.E. from Brown University and an M.S.E.E. from University of California at Berkeley. Ms. Hanford sits on the American Electronics Association s national board of directors.

*Dr. Paul Lo* has served as Senior Vice President and General Manager, Analog/Mixed Signal Group since September 2006. Prior to that he was Vice President of Engineering, 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.

Joseph W. Logan has served as Senior Vice President, Worldwide Sales since September 2006. Prior to that time he was head of sales for the North America East region from September 2001 until 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.

Brian E. Cabrera has served as Vice President, General Counsel and Secretary since June 2006. Prior to that, he was Senior Vice President, General Counsel and Secretary at Callidus Software, a provider of enterprise incentive management software systems, from August 1999 through June 2006. Prior to Callidus, Mr. Cabrera held senior legal positions at PeopleSoft, Inc., an enterprise software company, Netscape Communications, Inc., an internet software company, and Silicon Graphics, Inc., a computer hardware manufacturer. Mr. Cabrera holds a B.A. in Political Science and Philosophy and a Masters in Public Policy from the University of Southern California, as well as a Juris Doctorate from the University of Southern California Law School.

Joachim Kunkel has served as the Vice President and General Manager of the IP & Systems Group of Synopsys since September 2006. Before holding that position, he served in a number of senior positions at Synopsys, including Vice President of Engineering of the Solutions Group from August 2003 until September 2006, Vice President of Marketing of the IP and Design Services Business Unit from May 2002 until August 2003, and Vice President and General Manager of the System-Level Design Business Unit from October 1998 until May 2002. Mr. Kunkel received an M.S. in Electrical Engineering from the Aachen University of Technology in 1984.

	There are no family	relationships	among any Synopsys	executive officers	or directors.
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#### 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 Stock Market under the symbol SNPS. The following table sets forth for the periods indicated the high and low closing sale prices of our common stock, as reported by the Nasdaq Stock Market.

	Quarter Ended January 31,	April 30,	July 31,	October 31,
2006:				
High	\$ 21.83	\$ 22.96	\$ 21.90	\$ 22.50
Low	\$ 18.44	\$ 21.04	\$ 17.18	\$ 17.53
2005:				
High	\$ 19.55	\$ 18.80	\$ 18.80	\$ 19.18
Low	\$ 16.49	\$ 16.44	\$ 16.61	\$ 16.98

As of October 31, 2006, there were approximately 507 shareholders of record. To date, Synopsys has paid no cash dividends on its capital stock and has no current intention to do so. Synopsys 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 fiscal quarter ended October 31, 2006.

Period	Total Number Of Shares Purchased	Average Price Paid Per Share	Total Number Of Shares Purchased As Part Of Publicly Announced Programs	<b>Under Th</b>	
Month #1					
July 30, 2006 through					
September 2, 2006	531,598	18.0084	531,598	\$	257,497,269
Month #2					
September 3, 2006 through September 30, 2006	1,025,378	19.2958	1,025,378	\$	237,711,825
Month #3					
October 1, 2006 through					
October 28, 2006	54,799	19.8722	54,799	\$	236,622,851
Total	1,611,775	18.8907	1,611,775	\$	236,622,851

All shares were purchased pursuant to a \$500 million stock repurchase program approved by Synopsys Board of Directors on December 1, 2004. Funds are available until expended or until the program is suspended by the Chief Financial Officer or the Board of Directors.

The remaining information required by Item 5 is set forth in Note 7 of *Notes to Consolidated Financial Statements* incorporated by reference here.

Item 6. Selected Financial Data

	Fiscal Year Ended O 2006 (in thousands, except	2005		2004	2003	2002
Revenue(2)	\$ 1,095,560	\$ 991,931		\$ 1,092,104	\$ 1,176,983	\$ 906,534
Income (loss) before provisions for						
income taxes(3)	43,719	(7,789	)	91,592	218,989	(288,940)
Provision (benefit) for income						
taxes	18,977	9,325		16,508	74,568	(87,114)
Net income (loss)	24,742	(17,114	)	75,084	144,421	(201,826)
Net income (loss) per share(4):						
Basic	0.17	(0.12	)	0.49	0.95	(1.51)
Diluted	0.17	(0.12	)	0.47	0.91	(1.51)
Working capital	23,394	130,552		169,904	433,343	151,344
Total assets	2,157,822	2,133,424		2,087,567	2,300,916	1,977,278
Long-term debt		7,265		7,443	7,219	6,547
Stockholders equity	1,163,167	1,210,637		1,258,455	1,426,069	1,111,443
Long-term debt	, ,	7,265		7,443	7,219	6,547

Synopsys has a fiscal year that ends on the Saturday nearest October 31. Fiscal 2006, 2005, 2004, 2003, and 2002 were 52-week years. Fiscal 2007 will be a 53-week fiscal year.

In fiscal 2006, we identified errors which affected our income tax provision in fiscal years 2001 through 2005. We concluded that these errors were not material to any such prior year financial statements. Although the errors are not material to prior periods, we elected to revise prior year financial statements. The fiscal periods in which the errors originated, and the resulting change in provision (benefit) for income taxes for each such year, are disclosed in Note 9 of *Notes to Consolidated Financial Statements*.

- (2) Includes results of operations from acquired businesses from the date of acquisition. See Note 3 of *Notes to Consolidated Financial Statements*.
- (3) Includes charges of \$0.8 million, \$5.7 million, \$1.6 million, and \$19.8 million for fiscal 2006, 2005, 2004 and 2003, respectively, for in-process research and development. Fiscal 2005 includes \$33.0 million litigation settlement gain relating to the acquisition of Nassda Corporation. Fiscal 2002 includes merger-related and other costs of \$33.5 million and insurance premium costs of \$335.8 million related to our acquisition of Avant! Corporation in fiscal year 2002.
- (4) Per share data for all periods presented have been adjusted to reflect Synopsys two-for-one stock split completed on September 23, 2003.

## **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 Report. Please also see the cautionary language at the beginning of Part 1 of this Report regarding forward-looking statements.

#### **Business Environment**

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 heavily influence our business.

Since the 2000 through 2002 semiconductor downturn and subsequent recovery, our customers have focused significantly on expense reductions, including in their R&D budgets. This expense outlook has affected us in a number of ways. First, some customers have reduced their EDA expenditures by decreasing their level of EDA tool purchases, using older generations of EDA products or by not renewing maintenance services. Second, customers bargain more intensely on pricing and payment terms, which has affected revenues industry-wide. For example, customers desire to conserve cash by paying for licenses over time resulted in a shift of our license mix to an almost completely ratable model in the fourth quarter of fiscal 2004, in which substantially more revenue is recognized over time rather than at the time of shipment. This shift adversely affected our total revenue in fiscal 2004, 2005 and 2006. Third, some customers are consolidating their EDA purchases with fewer suppliers in order to lower their overall cost of ownership while at the same time meeting new technology challenges. This has increased competition among EDA vendors.

Recognizing that our customers will continue to spend cautiously and will work to aggressively contain costs, we are intensely focused on improving our customers overall economics of design by providing more fully integrated design solutions and offering customers the opportunity to consolidate their EDA spending with us. Over the long term, we believe EDA industry spending growth will continue to depend on growth in semiconductor R&D spending and on continued growth in the overall semiconductor market. The Semiconductor Industry Association has forecasted modest growth in semiconductor revenues during 2007 and we believe semiconductor R&D spending will grow as well. However, we cannot currently predict whether this outlook will contribute to higher EDA industry spending.

#### Fiscal 2006 Product Developments

During fiscal 2006, we announced or introduced a number of new products and product developments, including:

- Availability of our PrimeYield tool suite that helps integrate design with manufacturing by predicting design-induced mechanisms that threaten manufacturing tolerances and by providing automated correction guidance to upstream implementation tools.
- Release of enhancements to our TetraMAX automatic test pattern generation product that result in a typical speedup of three times or more in runtime performance compared with the previous version.
- Availability of a new family of process-aware design-for-manufacturing products that analyze variability effects at the custom/analog design stage for 45-nanometer and smaller designs,

- Availability of DesignWare USB 2.0 nanoPHY intellectual property (IP) for mobile, high volume consumer devices tailored specifically for low power consumption, small chip area and high manufacturing yield.
- Our DesignWare verification IP became the first to support the System Verilog language and methodology decreasing the cost of test bench development and helping designers reduce risk and meet project schedules.
- Availability of simulation software from our acquisition of SIGMA-C Software AG that allows semiconductor manufacturers and their suppliers to develop and optimize process sequences for optical lithography, e-beam lithography and next-generation lithography technologies.

Fiscal 2006 Financial Performance Summary

- Revenue was \$1,095.6 million, up 10% from \$991.9 million in fiscal 2006, primarily due to an increase in time-based license revenue from orders booked in prior periods which more than offset a decrease in service revenue recognized during fiscal 2006.
- Time-based license revenue increased 18% from \$743.7 million in fiscal 2005 to \$874.9 million in fiscal 2006, primarily reflecting the continuation of our highly ratable license model for an additional four quarters combined with increased business levels in earlier quarters.
- Upfront license revenue increased 4% from \$60.5 million in fiscal 2005 to \$63.1 million in fiscal 2006, within our target range, due to normal fluctuations in customer demand for upfront licenses.
- We derived approximately 7% of our software license revenue from upfront licenses and 93% from time-based licenses in fiscal 2006, versus approximately 8% and 92%, respectively, in fiscal 2005, within our target range for ratable license revenue.
- Maintenance revenue declined by 24% from \$136.3 million in fiscal 2005 to \$103.1 million in fiscal 2006 primarily as a result of non-renewal of maintenance by some of our existing perpetual license customers and the continuing shift to a larger percentage of time-based licenses in which maintenance is bundled and not charged separately. Professional service and other revenue, at \$54.5 million, increased 6% from \$51.4 million in fiscal 2005 due to the timing of customer acceptance of services performed under ongoing contracts.
- Net income was \$24.7 million compared to a net loss of \$(17.1) million in fiscal 2005, primarily due to increased revenue and reduced cost of goods sold arising from reduced amortization expense. This increase was partially offset by increased research and development expenses driven by acquisitions and increased investment in our core products, commencement of share-based compensation expense under SFAS 123(R) in fiscal 2006, and the absence of a large litigation settlement received in fiscal 2005.
- We repurchased approximately 10.0 million shares of our common stock at an average price of \$19.94 per share for a total of approximately \$200.0 million.
- Operating cash flow decreased 24% from \$269.2 million in fiscal 2005 to \$205.9 million in fiscal 2006 primarily as a result of increased payments to vendors, increased commission and bonus payments and the timing of billings on time-based license agreements. In addition, in fiscal 2005, operating income included a \$33 million litigation settlement gain relating to the acquisition of Nassda Corporation.

#### Fiscal 2006 Acquisitions

During fiscal 2006, we acquired: (1) HPL Technologies, Inc. a provider of yield management and test chip products that will allow designers to better address defects at the IC design phase, (2) Virtio Corporation, a creator of virtual platforms for embedded software development, which will help us provide an integrated implementation, verification and IP solution to speed up hardware and software development and (3) SIGMA-C Software AG, a Munich-based company providing simulation software that will allow semiconductor manufacturers and their suppliers to develop and optimize process sequences for optical lithography, e-beam lithography and next-generation lithography technologies. See Note 3 of *Notes to Consolidated Financial Statements*.

#### **Critical Accounting Policies and Estimates**

We base the discussion and analysis of our financial condition and results of operations upon our audited consolidated financial statements, which we prepare in accordance with U.S. generally accepted accounting principles. In preparing these financial statements, we must make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. 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.

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

- Revenue recognition;
- Valuation of intangible assets;
- Income taxes; and
- Valuation of share-based compensation

#### Revenue Recognition

We recognize revenue from software licenses and 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.

We have designed and implemented revenue recognition policies in accordance with Statement of Position (SOP) 97-2, Software Revenue Recognition, as amended.

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 revenue in the statement of operations.
- Term Licenses. We recognize the term license fee in full upon shipment of the software if payment terms require the customer to pay at least 75% of the term 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 statement of operations. For term licenses in which less than 75% of the term 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 revenue in the statement of operations.
- Perpetual Licenses. We recognize the perpetual license fee in full upon shipment of the software if payment terms require the customer to pay at least 75% of the perpetual 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 revenue in the 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 licenses is reported as time-based revenue in the statement of operations.

In addition, we recognize revenue from maintenance fees associated with term and perpetual licenses ratably over the maintenance period 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 service revenue in the statement of operations.

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 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 the related services 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) collectibility 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 software to our customers physically or electronically. For physical deliveries, the standard transfer terms are typically FOB shipping point. For electronic deliveries, delivery occurs when we provide the customer access codes, or license keys, that allow the customer to take immediate possession of the software by downloading it to the customer s hardware. We generally ship our software 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 software license 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 require 75% or more of the arrangement 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, we recognize revenue ratably even if the fee is fixed or determinable, due to the fact that VSOE for maintenance services does not exist for a TSL and due to revenue recognition criteria relating to arrangements that include rights to exchange products or receive unspecified future technology.
- Collectibility is Probable. We judge collectibility 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. If we determine at any time that collectibility 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 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 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 2006. As of October 31, 2006, the carrying amount of our intangible assets, net was \$106.1 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 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 deferred tax assets recorded on our balance sheet will ultimately be realized. If we determine 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 record an adjustment to the deferred tax asset valuation allowance as a charge to earnings in the period such determination is made.

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, 2006, there was approximately \$31.0 million in 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 payment of these amounts is unnecessary, 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 Revenue Agent s Report*, below, and Note 9 of *Notes to Consolidated Financial Statements* for a discussion of a Revenue Agent s Report from the Internal Revenue Service (IRS) we received in June 2005 asserting a very large net increase to our U.S. tax arising from the audit of fiscal years 2000 and 2001.

Valuation of Share-Based Compensation. Effective November 1, 2005, we adopted the provisions of Statement of Financial Accounting Standards No. 123(R), Share-Based Payment (SFAS 123(R)) using the modified prospective method. SFAS 123(R) establishes standards for accounting for transactions in which an entity exchanges its equity instruments, such as stock options, stock purchase rights, restricted stock or restricted stock units, for goods or services, such as the services of the entity semployees. SFAS 123(R) also addresses transactions in which an entity incurs liabilities in exchange for goods or services that are based on the fair value of the entity sequity instruments or that may be settled by the issuance of those equity instruments. SFAS 123(R) eliminates the ability to account for share-based compensation transactions using the intrinsic value method under Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and generally requires instead that these transactions be accounted for using a fair-value based method. Accordingly, we measure share-based compensation cost at the grant date, based on the fair value of the award, and recognize the expense over the employee s requisite service period using the straight-line attribution method. The measurement of share-based compensation cost is based on several criteria including, but not limited to, the valuation model used and associated input factors, such as expected term of the award, stock price volatility, risk free interest rate and award cancellation rate. 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.

#### **Results of Operations**

#### Revenue Background

We generate our revenue from the sale of software licenses, 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 general, we recognize revenue on a time-based software license order quarterly over the license term and on an upfront 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 generally generate revenue ratably over the maintenance period (normally one year). Professional service orders generally generate revenue upon completion and customer acceptance of contractually agreed milestones. 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, maintenance and professional service revenue for the period. We derive time-based license revenue in any quarter almost entirely from TSL orders received and delivered in prior quarters. We derive upfront license revenue directly from upfront term and perpetual license orders 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 almost entirely 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 very sensitive to the mix of time-based and upfront licenses delivered during the quarter. 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, upfront licenses generate current quarter revenue but no future revenue (e.g., a \$120,000 order for an upfront license generates \$120,000 in revenue in the quarter the product is shipped, but no future revenue). TSLs also result in a shift of maintenance revenue to time-based license revenue since maintenance is included in revenue reported for TSLs, while maintenance on upfront orders is charged and reported separately.

#### Total Revenue

1	Year Ended Oc	tober 31,		\$ Change	% Change	\$ Change	% Change
2	2006 2005 2004		2004	2005 to 2006		2004 to 2005	
				(dollars in millions)			
	\$1,095.6	\$991.9	\$ 1,092.1	\$103.7	10 %	\$(100.2)	(9)%

The increase in total revenue for fiscal 2006 compared to fiscal 2005 was due primarily to an increase in time-based license revenue from orders booked in prior periods which more than offset a decrease in service revenue during the fiscal 2006. The decrease in total revenue for fiscal 2005 compared to fiscal 2004 was due primarily to our license model shift begun in the fourth quarter of fiscal 2004, which significantly reduced both upfront license fees and maintenance revenue in fiscal 2005.

#### Time-Based License Revenue

	Year	Year Ended October 31,				\$ Change			nge	% Change	\$ Change	% Change	
	2006		200	5	2	200	4		2005 to	o 2006		2004 to 200	5
	(dolla	ars in mill	ions	)									
	\$ 8	374.9	\$	743.7	:	\$	663.2		\$	131.2	18 %	\$ 80.5	12 %
Percentage of total revenue	80	%	75		%	61		%					

The increase in time-based license revenue in fiscal 2006 compared to fiscal 2005, primarily reflecting the continuation of our highly ratable license model for an additional four quarters, under which previously booked orders continue to contribute to revenue in later periods, combined with increased business levels in earlier quarters. The increase in time-based license revenue in fiscal 2005 compared to fiscal 2004 was primarily due to our fourth quarter fiscal 2004 license model shift.

#### Upfront License Revenue

	20	Year Ended October 31, 2006 2005 20 dollars in millions)			200	\$ Change 2004 2005 to 2006		_	% Change		\$ Change 2004 to 2005		% Change					
	\$	63.1		\$	60.5		\$	216.0		\$	2.6		4 9	%	\$	(155.5)		(72)%
Percentage of total revenue	6		%	6		%	20		%									

The slight increase in upfront license revenue for fiscal 2006 compared to fiscal 2005 was primarily due to normal fluctuations in customer demand for upfront licenses following the adoption of our highly ratable license model. The significant decrease in upfront license revenue, in both percentage and absolute dollar terms, for fiscal 2005 compared to fiscal 2004 was primarily due to the fact that we shipped a substantially higher-than-average percentage of orders as upfront licenses in the second and third quarters of fiscal 2004 and subsequently shifted to a higher ratable license mix in the fourth quarter of fiscal 2004.

#### Maintenance and Service Revenue

	Year Ended 2006 (dollars in n	October 31, 2005 nillions)	2004	\$ Change 2005 to 2006	% Change	\$ Change 2004 to 2005	% Change
Maintenance revenue	\$ 103.1	\$ 136.3	\$ 170.1	\$ (33.2)	(24)%	\$ (33.8)	(20)%
Professional service and							
other revenue	54.5	51.4	42.8	3.1	6 %	8.6	20 %
Total maintenance and							
service revenue	\$ 157.6	\$ 187.7	\$ 212.9	\$ (30.1)	(16)%	\$ (25.2)	(12)%
Percentage of total revenue	14	% 19	% 19	%			

Our maintenance revenue has declined due to (1) the decrease in our upfront licenses (which reduces new maintenance orders since maintenance is purchased separately with upfront licenses), (2) generally lower maintenance rates on large perpetual transactions and (3) non-renewal of maintenance by certain customers on perpetual or other upfront licenses. With our license model shift, we expect progressively more of our maintenance revenue will be included in time-based license revenue and therefore for our separately recognized maintenance revenue to continue to decline. In addition, some customers may continue to choose in the future not to renew maintenance on upfront licenses for economic or other factors, which would adversely affect future maintenance revenue.

Professional service and other revenue increased in fiscal 2006 compared to fiscal 2005 and in fiscal 2005 compared to fiscal 2004 due to timing of performance milestones under ongoing contracts.

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

Certain Option Expenses. As previously disclosed in our Annual Report on Form 10-K for the fiscal year ended October 31, 2005, subsequent to the fourth quarter of fiscal 2005, we discovered an error in our option grant process related to the documentation of grant dates. This error was solely with respect to grants to non-executive officer employees. We recorded \$3.6 million in fiscal 2005 relating to this error as follows: \$0.5 million in cost of goods sold, \$1.3 million in research and development expense, \$0.9 million in sales and marketing expense and \$0.9 million in general and administrative expense. During the fourth quarter of fiscal 2006, we booked \$1.6 million in relation to this error as follows: \$0.2 million in cost of goods sold, \$0.8 million in research and development expense, \$0.4 million in sales and marketing expense and \$0.2 million in general and administrative expense. Finally, we expect to recognize an aggregate of approximately \$1.2 million, \$0.5 million and \$0.1 million of expense relating to this error in fiscal 2007, 2008 and 2009. The error was not material to any prior fiscal year s results of operations.

*Temporary Shutdown of Operations.* As a cost saving measure, we temporarily shut down operations in North America for three days during the first quarters of fiscal 2006, 2005 and 2004, respectively, and for four days during the third quarter of fiscal 2004 resulting in savings of approximately \$3.5 million in fiscal 2006, \$4.4 million in fiscal 2005, and \$7.6 million in fiscal 2004. The savings in fiscal years 2006, 2005 and 2004 relate primarily to salaries and benefits and are reflected in our consolidated financial statements as follows:

	Year Ended	Year Ended October 31,						
	2006	2005	2004					
	(in thousands	s)						
Cost of revenue	\$ 705	\$ 856	\$ 1,421					
Research and development	1,508	1,889	3,236					
Sales and marketing	890	1,169	2,038					
General and administrative	430	514	948					
Total Savings	\$ 3,533	\$ 4,428	\$ 7,643					

#### Functional Allocation of Operating Expenses

We allocate certain human resource programs, information technology and facility expenses among our functional income statement categories 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 Ended	October 31,		\$ Change	% Change	\$ Change	% Change
	2006	2005	2004	2005 to 2006		2004 to 2005	
	(dollars in n	nillions)					
Cost of license revenue	\$ 129.0	\$ 102.3	\$ 88.0	\$ 26.7	26 %	\$ 14.3	16 %
Cost of maintenance and service							
revenue	66.0	70.8	67.0	(4.8)	7 %	3.8	6 %
Amortization of intangible assets	28.5	81.5	102.2	(53.0)	(65)%	(20.7)	(20)%
Total	223.5	254.6	257.2	\$ (31.1)	(12)%	\$ (2.6 )	(1)%
Percentage of total revenue	20	% 26	% 23	%			

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 have been segregated from costs of revenue associated with internal functions which provide license delivery and post-customer contract support services. These group costs are then allocated by management between cost of license revenue and cost of maintenance and service revenue based on license and service revenue reported during the quarter.

Cost of license revenue. Cost of license revenue includes costs associated with the sale and licensing of our software products, both time-based and upfront. Cost of license revenue includes the allocated cost of employee salary and benefits for providing software delivery, including software production costs, product packaging, amortization of capitalized software development costs related to Synopsys products, documentation and royalties payable 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 related infrastructure necessary to operate our services and training organization. Further, cost of maintenance and service revenue includes allocated costs of employee salary and benefits for providing customer services, such as hotline and on-site support, production services and documentation of maintenance updates.

Amortization of intangible assets. See Amortization of Intangible Assets below for information regarding the amount of amortization charged to cost of revenue for the relevant periods.

The decrease in total cost of revenue in fiscal 2006 compared to fiscal 2005 was primarily due to the decrease of \$53.0 million in amortization of intangible assets resulting from completion of amortization of certain intangible assets primarily acquired in the acquisition of Avant! Corporation in June 2002. This decrease was partially offset by increases of (1) recognition of \$9.2 million in share-based compensation expense due to adoption of SFAS 123(R); (2) \$6.1 million in compensation and employee benefits due to our increased investment in personnel through acquisitions including \$1.0 million in compensation due to former ISE Integrated Systems Engineering AG employees based on achievement of certain sales and employee retention milestones; and (3) \$5.8 million in corporate allocated expenses including human resources, information technology and facilities costs, allocated to this line item compared to the same period in fiscal 2005 as a result of increased allocable expenses.

The decrease in total cost of revenue in fiscal 2005 compared to fiscal 2004 was primarily due to: (1) net reduction of \$20.7 million in amortization expense in core/developed technology caused by completion of amortization from fiscal 2002 acquisitions, partially offset by amortization charges from the ISE and Nassda acquisitions, and (2) the reduction in royalty expense of \$1.3 million primarily resulting from reversal of a \$1.0 million accrual recorded in fiscal 2004 for a potential payment ultimately not required to be paid. This decrease was partially offset by an increase of: (1) \$14.0 million in compensation and employee benefits as a result of (a) our increased investment in professional services personnel and

(b) higher variable compensation associated with our higher-than-expected business performance; (2) \$1.2 million in compensation due to former ISE employees based on achievement of certain sales and employee retention milestones; and (3) \$3.2 million in corporate allocated expenses including human resources, information technology and facilities costs, allocated to this line item compared to the same period in fiscal 2004 as a result of increased allocable expenses.

#### **Operating Expenses**

Research and Development

	Year End	ed October 31,		\$ Change	% Change	\$ Change	% Change
	2006	2005	2004	2005 to 2006		2004 to 2005	
	(dollars ii	n millions)					
	\$ 370.6	\$ 320.9	\$ 288.8	\$ 49.7	15 %	\$ 32.1	11 %
Percentage of total revenue	34	% 32	% 26	%			

The increase in research and development expense in fiscal 2006 compared to fiscal 2005 was primarily due to: (1) recognition of \$28.0 million in share-based compensation expense due to adoption of SFAS 123(R); (2) an increase of \$12.6 million in research and development personnel-related costs as a result of acquisitions including \$4.5 million in compensation due to former ISE employees now employed by Synopsys based upon achievement of certain sales and employee retention milestones; and (3) an increase of \$8.9 million in corporate allocated expenses, including human resources, information technology and facilities costs, allocated to this line item compared to the same period in fiscal 2005 as a result of increased corporate-wide allocable expenses.

The increase in research and development expense in fiscal 2005 compared to fiscal 2004 was primarily due to: (1) an increase of \$30.9 million in research and development personnel and related costs primarily as a result of the ISE and Nassda Corporation acquisitions, including \$5.3 million in compensation due to former ISE employees now employed by Synopsys based upon achievement of certain sales and employee retention milestones; and (2) an increase of \$4.7 million in human resources, information technology and facilities costs allocated to this line item compared to fiscal 2004. This increase was partially offset by a decrease of \$2.7 million in contractor costs as former contractors in lower-cost regions were converted to employees.

Sales and Marketing

	Year Ended	October 31,		\$ Change	% Change	\$ Change	% Change
	2006			2004 2005 to 2006		2004 to 2005	
	(dollars in n	nillions)					
	\$ 330.4	\$ 333.6	\$ 304.1	\$ (3.2)	(1)%	\$ 29.5	10 %
Percentage of total revenue	30	% 34	% 28	%			

The decrease in sales and marketing expense in fiscal 2006 compared to fiscal 2005 was primarily due to: (1) an \$10.6 million reduction in variable compensation driven by shipments relative to our operating plan; (2) a \$2.4 million reduction in sales and marketing personnel-related costs due to reductions in headcount; and (3) the absence in fiscal 2006 of \$6.4 million in costs associated with a reduction in force made during fiscal 2005. This decrease was partially offset by (1) recognition of \$16.2 million in share-based compensation expense due to adoption of SFAS 123(R); and (2) an increase of \$1.2 million in corporate allocated expenses, including human resources, information technology and facilities costs, allocated to this line item compared to the same period in fiscal 2005 as a result of increased allocable expenses.

The increase in sales and marketing expense in fiscal 2005 compared to fiscal 2004 was primarily due to: (1) an increase of \$27.8 million in variable compensation driven by shipments, higher commission rates applied to shipments beginning in fiscal 2005 and increased business performance-related compensation; (2) an increase of \$4.6 million in sales and marketing personnel and related costs due to increased headcount and acquisitions during the fiscal year; and (3) an increase of \$4.6 million in severance-related costs associated with a workforce reduction executed during the third and fourth quarters of fiscal 2005. These increases were partially offset by decreases of: (1) \$4.2 million as a result of a reduction in expenses for sales conferences and related meetings; (2) \$1.6 million in human resources, information technology and facilities corporate allocated costs allocated to this line item compared to fiscal 2004 as a result of decreased headcount; (3) \$1.2 million related to reduced depreciation to this line item; and (4) \$1.0 million related to reduced travel expenses.

#### General and Administrative

	Year Ende	ed October 31,		\$ Change	% Change	\$ Change	% Change
	2006 (dollars in	2005	2004	2005 to 2006		2004 to 2005	_
	\$ 112.9	\$ 105.0	\$ 122.5	\$ 7.9	8 %	\$ (17.5)	(14)%
Percentage of total revenue	10	% 11 <i>9</i>	% 11	%			· ·

The increase in general and administrative expense in fiscal 2006 compared to fiscal 2005 was primarily due to: (1) recognition of \$9.5 million in share-based compensation expense due to adoption of SFAS 123(R); (2) an increase of \$3.1 million in facilities costs and property taxes; (3) an increase of \$9.7 million in professional services expenses related to litigation matters, audit activities, Sarbanes Oxley Act compliance and tax services; (4) an increase of \$3.2 million as a result of reduction in bad debt reserve taken in fiscal 2005 in excess of those taken in fiscal 2006; and (5) an increase of \$2.2 million in telecommunication and networking expenses. This increase was partially offset by a decrease of (1) \$3.2 million decrease in compensation expense primarily related to reduction in headcount; (2) \$2.1 million decrease in travel, employee training and functions, and other related costs; and (3) \$15.4 million decrease in corporate allocated expenses, including human resources, information technology and facilities costs.

Fiscal 2004 general and administrative expenses were higher than fiscal 2005 primarily due to: (1) the \$10 million merger termination fee paid to Monolithic System Technology, Inc. (MoSys) in April 2004 in connection with termination of an acquisition agreement; (2) \$5.4 million in professional service fees primarily related to litigation associated with the MoSys termination incurred in 2004; (3) \$1.7 million in professional services fees incurred in connection with the proposed acquisition of MoSys expensed in the second quarter of fiscal 2004; (4) a decrease of \$3.2 million in bad debt reserve in fiscal 2005 due to lower than anticipated billings and successful collection efforts; (5) a decrease of \$1.9 million in facilities costs in fiscal 2005 due to closure of certain facilities; and (6) a decrease of \$6.3 million in corporate allocated expenses, including human resources, information technology and facilities costs. Lower fiscal 2005 expenses were partially offset by an increase of (1) \$3.5 million in employee compensation in fiscal 2005 due to increased headcount; (2) \$2.2 million in depreciation due to additional equipment and assets acquired and used this functional area; and (3) \$2.7 million in consulting costs primarily related to market and internal business process analyses. See Functional Allocation of Operating Expenses, above.

#### In-Process Research and Development

In-process research and development (IPRD) expense is comprised of in-process technologies of (1) \$0.8 million associated with the acquisition of HPL in fiscal 2006; (2) \$5.7 million associated with the acquisition of ISE in fiscal 2005; and (3) \$1.6 million associated with an immaterial acquisition in fiscal 2004. 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.* The value assigned to acquired in-process technology is determined by identifying products under research in areas for which technological feasibility had not been established as of the acquisition date. The value of in-process technology is then divided into two classifications: (1) developed technology (completed) and (2) in-process technology (to-be-completed), giving explicit consideration to the value created by the research and development efforts of the acquired business prior to the date of acquisition and expected to be created by Synopsys after the acquisition. These value creation efforts were estimated by considering the following major factors: (1) time-based data, (2) cost-based data and (3) complexity-based data.

The value of the in-process technology was determined using a discounted cash flow model that focuses on the income producing capabilities of the in-process technologies. Under this approach, the value is determined by estimating the revenue contribution generated by each of the identified products. Revenue estimates were based on (1) individual product revenues, (2) anticipated growth rates, (3) anticipated product development and introduction schedules, (4) product sales cycles, and (5) the estimated life of a product sunderlying technology. From the revenue estimates, operating expense estimates, including costs of sales, general and administrative, sales and marketing, income taxes and a use charge for contributory assets, were deducted to arrive at operating income. We estimated revenue growth rates for each product and gave consideration to relevant market sizes and growth factors, expected industry trends, the anticipated nature and timing of new product introductions by us and our competitors, individual product sales cycles and the estimated life of each product sunderlying technology. Operating expense estimates reflect Synopsys historical expense ratios. The resulting operating income stream was discounted to reflect its present value at the date of acquisition.

The rate used to discount the net cash flows from purchased in-process technology is our weighted-average cost of capital, taking into account our required rates of return from investments in various areas of the enterprise and reflecting the inherent uncertainties in future revenue estimates from technology investments including the uncertainty surrounding the successful development of the acquired in-process technology, the useful life of such technology, the profitability of such technology, if any, and the uncertainty of technological advances, all of which are unknown at this time.

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 - YieldDirector. This project was completed during fiscal 2006 and the resulting products have begun to generate revenue. The expenditures to complete HPL sacquired in-process technologies approximated the original estimates.

*ISE.* On November 2, 2004, we acquired ISE, a leading provider of TCAD (Technology Computer-Aided Design) software and related services. The IPRD expense related to the ISE acquisition was \$5.7 million. ISE had one IPRD project FLOOPS, a next generation process simulator.

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 Ende	ed October 31,		\$ Change	% Change	\$ Change	% Change
	2006	2005	2004	2005 to 2006		2004 to 2005	
	(dollars in	millions)					
Included in cost of revenue	\$ 28.5	\$ 81.5	\$ 102.2	\$ (53.0)	(65)%	\$ (20.7)	(20)%
Included in operating expenses	27.9	31.9	31.9	(4.0)	(13)%		%
Total	\$ 56.4	\$ 113.4	\$ 134.1	\$ (57.0)	(50)%	\$ (20.7)	(15)%
Percentage of total revenue	5 9	6 11 %	6 12 9	6			

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 2006 compared to fiscal 2005 was primarily due to completion of amortization of certain intangible assets acquired in the acquisition of Avant!.

The decrease in amortization of intangible assets in fiscal 2005 compared to fiscal 2004 is driven by completion of the amortization of the intangible assets related to core/developed technology from fiscal 2002 acquisitions, partially offset by amortization charges from the ISE and Nassda acquisitions.

See Note 4 of *Notes to Consolidated Financial Statements* for a schedule of future amortization amounts which is incorporated by reference here.

*Impairment of Intangible Assets.* There were no impairment charges related to intangible assets during fiscal 2006, 2005 or 2004.

#### Other Income, Net

	Year Ende 2006 (dollars in	ed October 31 2005 millions)	, 2004	\$ Change 2005 to 2006	% Change	\$ Change 2004 to 2005	% Change
Interest income, net	\$ 13.5	\$ 9.5	\$ 6.0	\$ 4.0	42 %	\$ 3.5	58 %
Loss on sale of investments, net of							
investment write-downs	(1.4)	(3.8)	(1.7)	2.4	63 %	(2.1)	(124)%
Foreign currency exchange (loss)							
gain	(0.5)	2.5	0.3	(3.0)	(120)%	2.2	733 %
Correction of an error in accounting for certain hedging							
transactions		3.0		(3.0)	(100)%	3.0	100 %
Other(1)	2.7	40.9	1.0	(38.2)	(93 )%	39.9	3,990 %
Total	\$ 14.3	\$ 52.1	\$ 5.6	\$ (37.8)	(73)%	\$ 46.5	830 %

For the fiscal year ended October 31, 2006, these amounts are comprised primarily of \$5.5 million in investment earnings related to the change in the fair value of the deferred compensation plan assets, partially offset by \$3.0 million in premiums paid on foreign exchange forward contracts. For the fiscal year ended October 31, 2005, the amount included a \$33 million litigation settlement gain relating to

the acquisition of Nassda Corporation, and \$5.8 million in the fair value increase of the non-qualified deferred compensation plan obligation.

In the first quarter of fiscal 2005, we re-evaluated our interpretation of certain provisions of Statement of Financial Accounting Standards No. 133, *Accounting for Derivatives and Hedging* (SFAS 133), resulting in the discovery of an error in the application of the standard to certain prior year foreign currency hedge transactions. The effect of the error was not material in any prior period and did not impact the economics of the our hedging program. To correct the error, we reclassified the remaining \$3.0 million related to the disallowed hedges from accumulated other comprehensive loss to other income in the fiscal year ended October 31, 2005. See Notes 2 and 10 of *Notes to Consolidated Financial Statements*.

#### **Income Taxes**

#### 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, 2006, current deferred tax assets, net of current deferred tax liabilities, totaled \$112.3 million. Non-current deferred tax assets, net of non-current deferred tax liabilities, totaled \$203.1 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.

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, 2006, there was approximately \$31.0 million 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 the fiscal years ended October 31, 2006, 2005 and 2004:

	Year Ended October 31,	
	2006 2005 2004	
	(dollars in millions)	
Income (loss) before provision for income taxes	\$ 43.7 \$ (7.8 ) \$ 91.6	ó
Provision for income tax	\$ 19.0 \$ 9.3 \$ 16.5	5
Effective tax rate	43.4 % (119.7 )% 18.0	%

For fiscal year 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. In addition as required by SFAS 123(R), no tax benefit was recorded in the fiscal year ended October 31, 2006 for expenses relating to qualified stock options and share-based compensation costs which are borne by our foreign subsidiaries.

For fiscal year 2005, the effective tax rate includes the impact of \$11.6 million tax expense associated with repatriation of approximately \$185.0 million of foreign earnings under the provisions of the American Jobs Creation Act of 2004. For fiscal year 2004, the effective tax rate reflects the tax benefit derived from higher earnings in low-tax jurisdictions.

During fiscal year 2006, primarily due to a tax accounting method change, there was a decrease of \$83.2 million in the current deferred tax assets, and a corresponding increase in non-current deferred tax assets. In the third quarter of fiscal year 2006, we changed our tax accounting method on our tax return for fiscal year 2005 with respect to the current portion of deferred revenue to follow the recognition of revenue under U.S. generally accepted accounting principles. This accounting method change, as well as other adjustments made to our taxable income upon the filing of the fiscal year 2005 tax return, resulted in an increase in our operating loss (NOL) carryforwards.

In May 2006, the Tax Increase Prevention and Reconciliation Act of 2005 was enacted, which provides a three-year exception to current U.S. taxation of certain foreign intercompany income. This provision will first apply to Synopsys in fiscal year 2007. Management estimates that had such provisions been applied for fiscal 2006, our income tax expense would have been reduced by approximately \$3 million.

In December 2006, the Tax Relief and Health Care Act of 2006 was enacted, which retroactively extended the research and development credit from January 1, 2006. As a result, we will record an expected increase in our fiscal 2006 research and development credit of between \$1.5 million and \$1.8 million in the first quarter of fiscal 2007.

Revision of Prior Year Financial Statements. As part of our remediation of the material weakness in internal control over financial reporting identified in fiscal 2005 relating to accounting for income taxes we implemented additional internal control and review procedures. Through such procedures, in the fourth quarter of fiscal 2006, we identified four errors totaling \$8.2 million which affected our income tax provision in fiscal years 2001 through 2005. We concluded that these errors were not material to any prior year financial statements. Although the errors are not material to prior periods, we elected to revise prior year financial statements to correct such errors. The fiscal periods in which the errors originated, and the resulting change in provision (benefit) for income taxes for each year, are reflected in the following table:

Year Ended October 31 (in thousands)									
2001	2002		2003		2004		2005		
\$205	\$	1,833	\$	5,303	\$	(748)	\$	1,636	

The errors were as follows: (1) Synopsys inadvertently provided a \$1.4 million tax benefit for the write-off of goodwill relating to an acquisition in fiscal 2002; (2) Synopsys did not accrue interest and penalties for certain foreign tax contingency items in the amount of \$3.2 million; (3) Synopsys made certain computational errors relating to foreign dividends of \$2.3 million; and (4) Synopsys did not record a valuation allowance relating to certain state tax credits of \$1.3 million. As result of this revision, non-current deferred tax assets decreased by \$8.1 million and current taxes payable increased by \$0.2 million. Retained earnings decreased by \$8.2 million and additional paid in capital decreased by \$0.1 million. See Item 9A. *Controls and Procedures* for a further discussion of our remediation of the material weakness.

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 2006.

IRS Revenue Agent s Report. On June 8, 2005, we received a Revenue Agent s Report (RAR) in which the Internal Revenue Service (IRS) proposed to assess a net tax deficiency for fiscal years 2000 and 2001 of approximately \$476.8 million, plus interest. Interest accrues on the amount of any deficiency finally determined until paid, and compounds daily at the federal underpayment rate, which adjusts quarterly. This proposed adjustment primarily relates to transfer pricing transactions between the Company and a wholly-owned foreign subsidiary. The proposed adjustment for fiscal years 2000 and 2001 is the total amount relating to these transactions asserted under the IRS theories.

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. We expect to begin the appeals process during fiscal 2007. However, final resolution of this matter could take a considerable time, possibly years. We strongly believe the proposed IRS adjustments and resulting proposed deficiency are inconsistent with applicable tax laws, and that Synopsys thus has meritorious defenses to these proposals. Accordingly, we will continue to challenge these proposed adjustments vigorously. While we believe the IRS asserted adjustments are not supported by applicable law, we believe it is probable we will be required to make additional payments in order to resolve this matter. However, based on our analysis to date, we believe we have adequately provided for this matter. If we determine our provision for this matter to be inadequate or we are required to pay a significant amount of additional U.S. taxes and applicable interest in excess of our provision for this matter, our results of operations and financial condition could be materially and adversely affected.

In the third quarter of 2006, the IRS started an examination of our federal income tax returns for the years 2002 through 2004. As of the end of fiscal 2006, no adjustments had been proposed as a result of this audit.

Repatriation of foreign earnings. The American Jobs Creation Act of 2004 (the Jobs Creation Act) provides for a special one-time elective dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer equal to 85% of the eligible distribution. During the fourth quarter of 2005, Synopsys repatriated \$360.0 million, of which approximately \$185.0 million qualified for the special one-time elective dividends received deduction and the balance of which constituted earnings that did not qualify under the Jobs Creation Act, previously taxed income and return of capital. Synopsys recorded tax expense of \$11.6 million related to the repatriation of \$360 million. During the fourth quarter of 2005, our chief executive officer approved a domestic reinvestment plan (DRIP) to invest up to \$185.0 million in foreign earnings in qualified investments pursuant to the Jobs Creation Act. As required by the Jobs Creation Act, the reinvestment plan was ratified by the Board of Directors in the first quarter of fiscal 2006. Synopsys satisfied the DRIP reinvestment requirements during fiscal 2005.

#### **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 2006.

Cash and cash equivalents and short term investments

			Dollar	%
	October 31, 2006 (dollars in millions)	October 31, 2005	Change	Change
Cash and cash equivalents	\$ 330.7	\$ 404.4	\$ (73.7)	(18)%
Short term investments	242.0	182.1	59.9	33 %
Total	\$ 572.7	\$ 586.5	\$ (13.8)	(2)%

During the year ended October 31, 2006, our sources and uses of cash included (1) cash provided by operating activities of \$205.9 million, (2) cash provided by issuance of common stock to employees of \$69.6 million, (3) acquisition of treasury stock of \$200.0 million, (4) purchases of investments of \$366.9 million, (5) proceeds from sales and maturities of short-term investments of \$305.5 million, (6) purchases of plant and equipment of \$48.5 million, and (7) cash paid for business acquisitions of \$41.1 million.

Cash flows

	Year Ended October 31,				Dollar		%	
	2006		200	5	Ch	nange	Change	
	(doll	lars in millio	ns)					
Cash provided by operations	\$	205.9	\$	269.2	\$	(63.3)	(24	)%
Cash used in investing activities	\$	(153.8)	\$	(171.5)	\$	17.7	10	%
Cash used for financing activities	\$	(130.4)	\$	(39.8)	\$	(90.6)	(228	)%

Cash flows from operating activities. Cash provided by operations is dependent primarily upon the payment terms of our license agreements. For an upfront license, we require that 75% of the license fee be paid within the first year. Conversely, payment terms for time-based licenses are generally extended; typically the license fee is paid quarterly in even increments over the term of the license. Accordingly, we generally receive cash from upfront licenses much sooner than for time-based licenses.

Cash provided by operating activities decreased primarily as a result of increased payments to vendors, increased commission and bonus payments and the timing of billing on time-based license agreements. In addition, in fiscal 2005, net income included a \$33 million litigation settlement gain relating to the acquisition of Nassda Corporation.

Cash flows from investing activities. The reduction in the cash used for investing activities primarily relate to acquisitions and the timing of purchases and maturities of marketable securities. We also use cash to invest in capital and other assets to support our growth.

Cash flows from financing activities. The increased use of cash for financing activities primarily relate to a higher amount of stock repurchases under our stock repurchase program, partially offset by increased proceeds from issuance of stock pursuant to exercises of stock options.

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, 2006, we held an aggregate of \$434.1 million in cash, cash equivalents and short-term investments in the United States and an aggregate of \$138.6 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. See Income Taxes above.

We expect that cash provided by operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in the 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

		Dollar	%
October 31, 2006 (dollars in millions)	October 31, 2005	Change	Change
\$122.6	\$ 100.2	\$ 22.4	22 %

The increase in accounts receivable was primarily due to the increased billings during the fiscal year ended October 31, 2006. Days sales outstanding (DSO) was 39 days at October 31, 2006 and 36 days at October 31, 2005. Our accounts receivable and DSO are primarily driven by our billing and collections activities.

### Net Working Capital

Working capital is comprised of current assets less current liabilities, as shown on our balance sheet. As of October 31, 2006, our working capital was \$23.4 million, compared to \$130.6 million as of October 31, 2005. The decrease in net working capital of \$107.2 million was primarily due to (1) a decrease of \$73.7 million in cash and cash equivalents; (2) a decrease of current deferred tax assets of \$83.2 million, primarily due to a tax accounting method change; (3) a decrease in income taxes receivable of \$5.8 million; (4) an increase in income taxes payable of \$21.5 million; (5) an increase in deferred revenue of \$29.9 million; and (6) a net increase of \$2.8 million in accounts payable and other liabilities which included a reclassification of debt of \$7.5 million from long term to short term debt. This decrease was partially offset by (1) an increase in short-term investments of \$59.9 million; (2) an increase in prepaid and other assets of \$27.4 million, which includes land of \$23.4 million reclassified from property plant and equipment to asset held for sale within prepaid expense and other assets on our Consolidated Balance Sheet; and (3) an increase in accounts receivable of \$22.4 million.

#### Other Commitments Revolving 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 its foreign subsidiaries. The facility replaces our previous \$250.0 million senior unsecured credit facility, which was terminated effective October 20, 2006. 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, 2006 we had no outstanding borrowings under this credit facility and were in compliance with all the covenants.

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, 2006.

	Total (in thousands)	Fiscal 2007	Fiscal 2008/ Fiscal 2009	Fiscal 2010/ Fiscal 2011	Thereafter
Long-Term Obligations(1)	\$ 2,875	\$ 575	\$ 1,150	\$ 1,150	\$
Lease Obligations:					
Capital Lease	1,550	979	571		
Operating Leases(2)	199,682	32,823	57,346	46,967	62,546
Purchase Obligations(3)	65,710	41,514	22,516	1,680	
Other liabilities on Balance Sheet(4)	7,596	7,596			
Total	\$ 277,413	\$ 83,487	\$ 81,583	\$ 49,797	\$ 62,546

- (1) This commitment relates to the fees associated with the revolving credit facility. Additional information is provided in Note 5 of *Notes to Consolidated Financial Statements*.
- (2) Additional information is provided in Note 6 of *Notes to Consolidated Financial Statements*.
- 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, 2006. 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) Includes (a) approximately \$6.1 million in promissory notes payable in September 2007 issued in connection with an acquisition in September 2002 and (b) a bond payable to the city of San Jose for participating in a development project for land owned by us. Additional information is provided in Note 5 of *Notes to Consolidated Financial Statements*. Certain long-term liabilities reflected on our balance sheet, such as unearned revenue, are not presented in this table because they do not require cash settlement in the future.

In connection with our acquisitions completed prior to October 31, 2006, we may be obligated to pay up to an aggregate of \$14.6 million in cash during the next 12 months and an additional \$11.3 million in cash during the two years subsequent to fiscal 2007 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.

#### **Related Party Transactions**

For information regarding related party transactions, see Note 13 of *Notes to Consolidated Financial Statements* and Part II, Item 13. *Certain Relationships and Related Transactions* included in this Annual Report on Form 10-K and incorporated by reference here.

#### **Effect of New Accounting Pronouncements**

Please see Note 14 of *Notes to Consolidated Financial Statements* included in Part II, Item 8. *Financial Statements and Supplementary Data* for a description of the effect of new accounting pronouncements on Synopsys, which is incorporated by reference here.

## 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, 2006:

	Carrying Value (in thousands)	Weighted Average Total Return
Money Market Funds (U.S.)	\$ 179,457	3.31 %
Short-term Investments (U.S.)	241,963	4.08 %
Cash Deposits and Money Market Funds (International)	98,008	3.91 %
Total interest bearing instruments	\$ 519,428	3.78 %

As of October 31, 2006, the stated maturities of our current short-term investments are \$51.6 million within one year, \$91.2 million within one to five years, \$10.5 million within five to ten years and \$88.7 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, 2006 that are subject to interest rate risk by calendar year of expected duration and average interest rates:

	Year Ended December 31,												
	2006 (in thousands)		2007		2008			2009		Tot	al	Fair Valu	
Cash equivalents													
(variable rate)	\$ 277,465									\$	277,465	\$	277,465
Average interest rate	3.54	%											
Short-term investments													
(variable rate)	\$ 57,848		\$ 6,142							\$	63,990	\$	63,990
Average interest rate	3.60	%	3.68	%									
Short-term investments													
(fixed rate)	\$ 14,126		\$ 76,69	9	\$	69,440		\$ 17,70	07	\$	177,972	\$	177,972
Average interest rate	3.89	%	3.52	%	3.57		%	3.57	%				

In comparison, the following table presents the amounts of our cash equivalents and investments as of October 31, 2005 that were subject to interest rate risk by calendar year of expected duration and average interest rates:

	Year Ended De	Year Ended December 31,						
	2005 (in thousands)	2006	2007 2008	Total	Fair Value			
Cash equivalents								
(variable rate)	\$ 389,516			\$ 389,516	\$ 389,516			
Average interest rate	2.38	%						
Short-term investments								
(variable rate)	\$ 106,328	\$ 5,660		\$ 111,988	\$ 111,988			
Average interest rate	2.68	% 3.07	%					
Short-term investments								
(fixed rate)	\$ 9,004	\$ 33,642	\$ 9,266 \$ 18,170	\$ 70,082	\$ 70,082			
Average interest rate	2.96	% 2.99	% 3.14 % 3.24	%				

Foreign Currency Risk. The functional currency of each of Synopsys active foreign subsidiaries is the foreign subsidiary s local currency, except for our principal Irish and Swiss subsidiaries whose functional currencies are the U.S. dollar. We engage in a program to minimize the effect of changes in the exchange rate between a given functional currency (i.e. the yen in the case of our Japanese subsidiary) and the corresponding non-functional currency transactions (i.e. receivables denominated in the U.S. dollar in the case of our Japanese subsidiary). We hedge the following types of non-functional-currency-denominated balances and transactions: (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 the Euro and British pound. A description of our accounting for foreign currency contracts is included in Note 2 of *Notes to Consolidated Financial Statements*.

The following table provides information about our foreign currency contracts as of October 31, 2006:

	Amount in U.S. Dollars (in thousands)	Weighted Average Contract Rate
Forward Contract Values:		
Euro	\$ 69,652	0.78445
Japanese yen	49,821	118.65
British pound sterling	26,343	0.53361
Canadian dollar	18,861	1.1269
Taiwan dollar	4,586	33.22
Israeli shekel	3,421	4.2881
Korean Won	3,380	958.5
Chinese renminbi	2,757	7.8775
India Rupee	3,712	45.44
Singapore dollar	1,717	1.57387
Swedish Krona	754	7.32158
Swiss Franc	316	1.26353
	\$ 185,320	

The following table provides information about our foreign currency contracts as of October 31, 2005:

	Amount in U.S. Dollars (in thousands)	Weighted Average Contract Rate
Forward Contract Values:		
Japanese yen	\$ 66,403	114.86
Euro	60,284	0.82175
Canadian dollar	12,020	1.18676
British pound sterling	8,633	0.56503
Taiwan dollar	4,876	33.66
Israeli shekel	3,699	4.6341
Chinese renminbi	2,314	8.06
Korean Won	1,865	1055.5
India Rupee	1,401	45.37
Singapore dollar	1,143	1.6915
Swedish Korna	747	7.935
Swiss Franc	499	1.28484
	\$ 163,884	

The amounts shown in the tables include the balances and transactions described above. The maximum original duration of the currency contracts shown is 15 months for our Euro forward contracts, 12 months for our British pound forward contracts and one month for other currencies. Due to the short-term nature of these contracts, the contract rates approximate fair value as of October 31, 2006 and 2005.

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 above providing information as of October 31, 2006, the fair value of the contracts would decrease by approximately \$6.9 million, and we would be required to pay approximately \$6.9 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 \$6.9 million that would offset the loss and negative cash flow on the maturing forward contracts.

Net unrealized losses of approximately \$2.1 million and \$0.6 million, net of tax are included in accumulated other comprehensive loss in our consolidated balance sheets as of October 31, 2006 and October 31, 2005, 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.

In the first quarter of fiscal 2005, Synopsys reevaluated its interpretation of certain provisions of SFAS 133, resulting in the discovery of an error in the application of the standard to certain prior year foreign currency hedge transactions. The effect of the error was not material in any prior period and did not impact the economics of Synopsys hedging program. To correct the error, Synopsys reclassified the remaining \$3.0 million related to the disallowed hedges from accumulated other comprehensive loss to other income in the three months ended January 31, 2005.

Foreign currency contracts entered into in connection with our hedging activities contain credit risk in that the counterparty may be unable to meet the terms of the agreements. We have limited these agreements to major financial institutions to reduce this credit risk. Furthermore, we monitor the potential risk of loss with any one financial institution. We do not enter into forward contracts for speculative purposes.

Equity Risk. Our strategic investment portfolio as of October 31, 2006 consists of approximately \$4.9 million of minority equity investments in publicly traded and in privately held companies compared to approximately \$8.1 million as of October 31, 2005. The securities of publicly traded companies are generally 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 2006 and 2005, we reduced the value of our strategic investment portfolio by \$1.3 million and \$4.5 million, respectively. During the fiscal year ended October 31, 2006, the prior investments of \$1.9 million and \$1.7 million in HPL and Virtio were included in the purchase price. None of our investments in our strategic investment portfolio are held for trading purposes. See Note 3 of Notes to Consolidated Financial Statements for further discussion.

#### **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, 2006 and 2005, and the related consolidated statements of operations, stockholders—equity and comprehensive income (loss), and cash flows for each of the years in the three-year period ended October 31, 2006. These consolidated financial statements are the responsibility of the Company—s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Synopsys, Inc. and subsidiaries as of October 31, 2006 and 2005, and the results of their operations and their cash flows for each of the years in the three-year period ended October 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in note 2 to the consolidated financial statements, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, on November 1, 2005.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the internal control over financial reporting of Synopsys, Inc. as of October 31, 2006, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated January 11, 2007, expressed an unqualified opinion on management s assessment of, and the effective operation of, internal control over financial reporting.

/s/ KPMG LLP

Mountain View, California January 11, 2007

# SYNOPSYS, INC. CONSOLIDATED BALANCE SHEETS (In thousands, except par value amounts)

	October 31, 2006	2005
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 330,759	\$ 404,436
Short-term investments	241,963	182,070
Total cash, cash equivalents and short-term investments	572,722	586,506
Accounts receivable, net	122,584	100,178
Deferred income taxes	112,342	195,501
Income taxes receivable	42,538	48,370
Prepaid expenses and other current assets	44,304	16,924
Total current assets	894,490	947,479
Property and equipment, net	140,660	170,195
Long-term investments	4,877	8,092
Goodwill	735,643	728,979
Intangible assets, net	106,144	142,519
Long-term deferred income taxes	206,254	74,332
Other assets	69,754	61,828
Total assets	\$ 2,157,822	\$ 2,133,424
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 234,149	\$ 231,359
Accrued income taxes	191,349	169,879
Deferred revenue	445,598	415,689
Total current liabilities	871,096	816,927
Deferred compensation and other liabilities	69,889	63,841
Long-term deferred revenue	53,670	42,019
Stockholders equity:		
Preferred stock, \$0.01 par value; 2,000 shares authorized; none outstanding		
Common stock, \$0.01 par value; 400,000 shares authorized; 140,568 and 145,897 shares		
outstanding, respectively	1,406	1,459
Capital in excess of par value	1,316,252	1,263,258
Retained earnings	170,743	162,878
Treasury stock, at cost; 16,619 and 11,259 shares, respectively	(312,753)	(199,482
Deferred stock compensation		(1,475
Accumulated other comprehensive loss	(12,481 )	(16,001
Total stockholders equity	1,163,167	1,210,637
Total liabilities and stockholders equity	\$ 2,157,822	\$ 2,133,424

See accompanying notes to consolidated financial statements.

# SYNOPSYS, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (In thousands, except per share amounts)

	Year Ended October 3	1,		
	2006	2005	2004	
Revenue:				
Time-based license	\$ 874,862	\$ 743,723	\$ 663,244	
Upfront license	63,050	60,466	215,955	
Maintenance and service	157,648	187,742	212,905	
Total revenue	1,095,560	991,931	1,092,104	
Cost of revenue:				
License	129,052	102,327	88,054	
Maintenance and service	65,970	70,780	66,951	
Amortization of intangible assets	28,505	81,529	102,181	
Total cost of revenue	223,527	254,636	257,186	
Gross margin	872,033	737,295	834,918	
Operating expenses:				
Research and development	370,629	320,940	288,763	
Sales and marketing	330,361	333,642	304,053	
General and administrative	112,873	104,989	122,509	
In-process research and development	800	5,700	1,638	
Amortization of intangible assets	27,938	31,869	31,928	
Total operating expenses	842,601	797,140	748,891	
Operating income (loss)	29,432	(59,845)	86,027	
Other income, net	14,287	52,056	5,565	
Income (loss) before provision for income taxes	43,719	(7,789)	91,592	
Provision for income taxes	18,977	9,325	16,508	
Net income (loss)	\$ 24,742	\$ (17,114)	\$ 75,084	
Net income (loss) per share:				
Basic	\$ 0.17	\$ (0.12)	\$ 0.49	
Diluted	\$ 0.17	\$ (0.12)	\$ 0.47	
Shares used in computing per share amounts:				
Basic	142,830	144,970	154,439	
Diluted	144,728	144,970	159,991	

See accompanying notes to consolidated financial statements.

## SYNOPSYS, INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

## AND COMPREHENSIVE INCOME (LOSS)

(In thousands)

	Common	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, 2003	155,837	\$ 1,560	\$ 1,198,421	\$ 244,638	\$ (20,733)	) \$ (7,170)	\$ 9,353	\$ 1,426,069
Components of comprehensive income:								
Net income				75,084			75,084	75,084
Unrealized gain on investments, net of tax of \$(139)							295	
Deferred loss on cash flow hedges, net of tax of \$1,270							(2,699 )	
Reclassification adjustment on deferred (gains) losses on cash flow hedges, net of tax of \$2,972							(7,078 )	
Foreign currency translation adjustment							(516 )	
Accumulated other comprehensive (loss) Total comprehensive income							(9,998 ) 65,086	(9,998 ) 65,086
Amortization of deferred stock compensation, net							05,000	,
of forfeitures			(1,083	)		4,438		3,355
Acquisition of treasury stock	(16,916)	(161)	161		(423,303	)		(423,303)
Common stock issued	8,457	75	12,537	(124,170	) 268,274			156,716
Tax benefits associated with exercise of stock options			30,532					30,532
Balance at October 31, 2004 53	147,378	\$ 1,474	\$ 1,240,568	\$ 195,552	\$ (175,762)	\$ (2,732)	\$ (645 )	\$ 1,258,455

SYNOPSYS, INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

 ${\bf AND}\;{\bf COMPREHENSIVE}\;{\bf INCOME}\;({\bf LOSS})({\bf Continued})$ 

(In thousands)

			Capital in			Accumulated			
			Excess			Deferred	Other	Other	
	Common Stock		of Par	Retained	Treasury	Stock	Comprehensive		
	Shares	Amount	Value	Earnings	Stock	Compensation	Income (Loss)	Total	
Balance at October 31, 2004	147,378	\$ 1,474				-			