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

FORM 10-K

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

For the year ended October 31, 2003

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 0-19807

SYNOPSYS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

56-1546236
(I.R.S. Employer
Identification No.)

700 East Middlefield Road, Mountain View, California 94043

(Address of principal executive offices, including zip code)

(650) 584-5000

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act: None

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

Common Stock, \$0.01 par value

(Title of Class)

Preferred Share Purchase Rights

(Title of Class)

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

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

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes No

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 \$2,286,755,272. Excludes an aggregate of 94,085,796 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, giving effect to the two-for-one stock split completed on September 23, 2003. 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 January 2, 2004, approximately 156,562,816 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, 2003

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PART I

This Annual Report on Form 10-K, including Item 1, “Business,” includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 that involve risks, uncertainties and assumptions. If these risks or uncertainties materialize, or if our assumptions are incorrect, our actual results could differ materially from those expressed or implied by these forward-looking statements. These statements include, but are not limited to statements concerning: our business, product and platform strategies; benefits we expect from previous and future acquisitions; completion of development of our unfinished products or further development or integration of our existing products; the shift of semiconductor manufacturing to 130 nanometer and below silicon processes; the expected customer benefits of the Milkyway™ design database; our future research and development spending; continuation of current industry trends towards vendor consolidation; customer interest in more highly integrated tools and design flows; our expectations of the continuing success of our intellectual property and new ventures initiatives; and our expectations of our future liquidity requirements. For a discussion of certain risks or uncertainties which could cause our actual results to differ materially from those we project in these forward-looking statements, please see Part II, Item 7, “Factors That May Affect Future Results” under Management’s Discussion and Analysis of Financial Condition and Results of Operations below. The information we include in this Form 10-K is as of its filing date with the Securities and Exchange Commission and future events or circumstances could differ significantly from the forward-looking statements included in this report. We assume no obligation, and do not intend, to update these forward-looking statements.

Item 1. Business

Introduction

Synopsys, Inc. (Synopsys) is the world leader in electronic design automation (EDA) software used to design complex integrated circuits (ICs) and systems-on-chips (SoCs) in the global semiconductor and electronics industries. Our software and intellectual property products and design services provide a complete IC design and verification solution from original concept to the actual chip, enabling our customers to bring advanced products to market quickly.

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, telephone number (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 are available, free of charge, on our Internet website (www.synopsys.com). We post these reports as soon as practicable after we file them with the Securities and Exchange Commission.

The Role of EDA in the Electronics Industry

Continuing technology advances in the semiconductor industry have dramatically 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 approximately double every two years the number of transistors that can be placed on a chip. As a result, state-of-the-art ICs now hold tens of millions of transistors and have feature widths of 130 nanometers (billionths of an inch), going to 90 nanometers and below.
- Microprocessors operating at more than 3 gigahertz, a speed unheard of only a few years ago, are readily available today.

- Chips have become more power efficient to address demand for smaller and more powerful handheld devices such as cell phones and personal digital assistants.
- Increasingly, single SoCs can handle functions formerly performed by multiple ICs attached to a printed circuit board.

Combined, these advances in semiconductor technology have driven development of lower cost, higher performance computers, wireless communications networks, cell phones, hand-held personal devices, Internet routers and a wealth of other electronic devices. Each advance, however, has introduced new challenges for all participants in semiconductor production, including designers, manufacturers, equipment manufacturers and EDA software suppliers.

The IC Design Process

EDA software is central to the IC design process, as it enables designers to:

- Address ever-increasing complexity by moving to less detailed, higher-level design representations of the chip's intended functionality;
- Translate these high-level representations automatically into successively more detailed forms, from symbolic, front-end system and logic designs to geometric, back-end physical layout designs; and
- Verify at each stage in the design process that the chip's design is sound and that the chip when manufactured will function as originally intended.

In simplified form, IC design consists of system design, logic design, functional verification, physical design and physical verification.

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 Verilog or VHDL. This phase yields a relatively high-level, "register transfer level" (RTL) description of the chip. System design is an early stage market segment for EDA companies, as most EDA products have focused to date on logic design, functional verification and physical design and verification.

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 "net list" describing the various groups of transistors, or "gates," to be built on the chip. Related programs insert into the design the additional circuitry that will be needed to test the chip after manufacture.

In a growing number of designs, logic synthesis is performed together with a portion of physical design. This combined process, known as "physical synthesis," produces a data file describing the chip plus a portion of the chip's physical layout. Also, in a growing number of SoCs, designers are increasingly performing "design planning" in which the designer determines the location of the major functional "blocks" on the SoC prior to logic synthesis.

Functional Verification. Before and after logic design, the designer uses testbench automation and other verification tools to simulate large sets of inputs that a given IC design might confront in real-life operation. By running these extensive tests, the designer can verify that the design will function as intended.

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 a "place and route" tool. 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." Then the designer adds the connections between the transistors, a process known as "routing." The output of place and route programs is one or more data files that can be read by physical verification programs (as described below) or by the equipment used to manufacture the chip.

Physical Verification. Before sending the chip design files to a manufacturer for fabrication, the designer must perform a series of further verification steps, confirming again that the chip will still operate at the desired speed and checking to make sure that the final design complies with the specific requirements of the fabrication facility that will manufacture the chip. The designer may need to add features to the design to ensure that the chip can be manufactured successfully. The completion of this final phase is called “tapeout.”

In actual chip design, each of these steps has a number of additional elements, and designers often undertake the various design and verification steps in a different order than described above, and repeat one or more steps multiple times. Further, several of the steps, especially logic design and physical design, are becoming more integrated with each other. If at any stage of the process the designer determines the chip design will not perform as intended, the designer must go back one or more steps and correct the problem, then continue through subsequent steps. Recreating a chip’s logic design, devising and performing simulation over again, and other iterations all take time. Each such iteration adds significant costs, and makes it more difficult for the designer to meet time-to-market goals.

Current Issues Facing IC Designers

As chip technology continues to advance, our customers face three principal types of interrelated challenges:

- *Product Challenges.* Chips are differentiated on a number of dimensions, including size, speed, functionality, power consumption and performance. The designer must balance each dimension against the others, making key tradeoff decisions—often through multiple iterations—to reach a final design. As chips become more complex, this balancing of factors becomes disproportionately more difficult. In the meantime, designers of advanced chips must also successfully address technical issues, including:
 - *Timing closure:* achieving consistency between the speed of the chip after logic design and the speed of the chip after physical design;
 - *Signal integrity:* a general term describing the many electrical effects, like cross-talk and other forms of interference, that occur as the wires on a chip get more narrow and closer together;
 - *Power management:* reducing power consumption is an important objective for chips to be used in battery-operated devices, such as laptop computers and cell phones;
 - *Verification:* the number of tests required to verify a chip increases geometrically as the number of transistors increases, to the point that verification is the single most time-consuming and resource intensive aspect of overall design;
 - *Manufacturability:* due in substantial part to steadily decreasing feature widths and thus increasing feature density, faithfully translating the design produced by EDA tools into the intricate pattern of wires and transistors on the chip has become significantly more difficult;
 - *Design for test:* ensuring that the chip can be tested rapidly and at a reasonable cost once manufactured, despite substantial increases in the number of circuits on the chip that need testing; and
 - *Yield:* ensuring that the chip can be manufactured successfully and at an acceptable number of good chips per wafer.
- *Cost.* In planning a chip project, our customers must consider design costs, manufacturing costs and support costs, all of which are steadily increasing. The higher the cost, the higher the expected volume of chips the customer must sell to make a given chip project profitable. Faced with increasing costs, our customers continue to focus intensely on controlling their research and development and manufacturing costs, including their costs in EDA. As a result, many of our customers have begun consolidating suppliers to improve their purchasing terms and, more importantly, to gain the benefits of better integrated products.

- *Schedule.* Economic pressures, competition and continuing innovation continue to shorten the life cycle of electronic products. Accordingly, time-to-market is critical to a product's commercial success. The design time for a product's IC components is a major determining factor of that product's time-to-market. Accordingly, our customers require EDA products that can address greater complexity, while increasing design speed and maintaining design reliability.

Synopsys Overview

We provide products and services that help our customers meet the challenges of designing leading-edge ICs. As a result of our mid-2002 acquisition of Avant! Corporation (Avant!), we now offer a comprehensive suite of system design, logic design, functional verification, physical design and physical verification products. Our March 2003 acquisition of Numerical Technologies, Inc. (Numerical) expanded our offerings of manufacturing technologies and products geared towards small geometry designs. We also sell the broadest array of pre-verified intellectual property (IP) components of any company in the EDA industry. Finally, we offer a full range of professional services, including turnkey design services, design assistance and methodology consulting.

We market our products worldwide and offer comprehensive customer service, education, consulting and support as integral components of our product offerings. We market our products primarily through our direct sales force. We have licensed our products to most of the world's leading semiconductor, computer, communications, electronics and device companies.

Strategy

Our strategy has three principal components. First, we have historically focused, and will continue to focus, on providing our customers the most technologically advanced products to address each step in the IC design process. Second, building on the strength of our individual products, we will continue to focus on developing broad, increasingly integrated "platforms," or collections of key individual products that are tightly integrated through the use of common technologies, to deliver enhanced value. In fiscal 2003, we created two distinct platforms: our Galaxy Design Platform and our Discovery Verification Platform. Third, we will expand our product offerings in areas offering the potential for rapid growth. For example, we have undertaken initiatives in both the intellectual property and design for manufacturing segments as described below under *Products and Services*.

Organization

We operate in a single segment and are currently organized into four primary groups: Implementation, Verification, Solutions and New Ventures.

- *Implementation Group:* develops and markets the products included in the Galaxy Design Platform and related products.
- *Verification Group:* develops and markets the products included in the Discovery Verification Platform and related products.
- *Solutions Group:* develops and markets our DesignWare® library of pre-designed IP blocks for chip designers and provides turnkey IC design and verification services.
- *New Ventures Group:* focuses on our Design for Manufacturing initiatives and analog/mixed-signal design and verification products.

Our other groups include Worldwide Sales, Worldwide Application Services, Finance, Human Resources and Facilities, and Chief Technology Office.

Products and Services

Our products and services focus on the principal needs of semiconductor designers and, at a business level, are divided into the four groups specified above. We provide financial information regarding our products and services under Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Revenue—Product Groups*.

Implementation Group

Galaxy Design Platform. In February 2003, we announced the combination of many of our leading IC design products into a single, unified platform called the Galaxy™ Design Platform. Galaxy includes the following products:

- *Design Compiler*® is our market-leading logic synthesis tool used by a broad range of companies engaged in the design of ICs to optimize their designs for performance and area.
- *Physical Compiler*® is our physical synthesis product which unites logic synthesis and placement functionality and addresses critical timing problems encountered in designing advanced ICs and SoCs.
- *Module Compiler*™ allows designers to reuse their datapath structures to obtain the best implementation for their designs.
- *Power Compiler*™ helps designers manage and verify power consumption at different levels of the design process.
- *DFT Compiler*™ inserts functional and test logic required to enable efficient, high-coverage testing of the chip after manufacturing.
- *Jupiter XT*™ is our hierarchical design planning tool that allows designers to quickly partition their chip design into the best physical hierarchy to optimize logic synthesis and physical implementation.
- *Apollo*™ is our basic physical design tool used for the placement and routing of a chip.
- *Astro*™ is our advanced physical design system for optimization, placement and routing while concurrently accounting for physical effects.
- *PrimeTime*®/*PrimeTime SI* are timing analysis products that measure and analyze the speed at which a design will operate when it is fabricated. PrimeTime SI analyzes the effect of cross-talk on timing, an increasingly important issue at chip geometries below 180 nanometers.
- *Star-RCXT*™ is our industry-leading extraction solution for analyzing IC layout data and determining key electrical characteristics of a chip, such as capacitance and resistance.
- *Hercules*™ is our physical verification product family that performs design-rule checking, electrical rule checking, and layout versus schematic verification.
- *Milkyway*™ *Database* is a common design data repository which enables better interoperability among implementation and analysis tools. Storing design data in this single database with rapid read/write access can reduce data translation times between tools and inconsistent interpretations of diverse data. We opened this database to our customers and other EDA vendors in February 2003 to reduce integration costs for our customers and advance tool interoperability in the industry.

With the Galaxy Design Platform, our goal is to provide our customers a single, integrated IC design platform based on leading individual products which incorporates common libraries and consistent timing, delay calculation and constraints throughout the design process using our open Milkyway database, and yet allows designers the flexibility to integrate internally developed and third-party tools. With this advanced functionality,

common foundation and flexibility, our Galaxy Design Platform should help reduce design times, decrease integration costs and minimize the risks inherent in advanced, complex IC designs.

Verification Group

Discovery Verification Platform. Also during fiscal 2003, we introduced our Discovery™ Verification Platform. The Discovery Platform combines many of our verification and nanometer level analysis tools in a unified environment to provide high performance and efficient interaction among these technologies. The Discovery Verification Platform includes the following products:

- *VCS*® is our high performance software simulator that serves as the basic engine of the Discovery Verification Platform and is often used in simulation “farms” consisting of hundreds or thousands of computers. VCS includes technologies that support model development, testbench creation, coverage feedback and debugging techniques.
- *System Studio* is a verification environment which focuses on the interaction between software and hardware and permits designers to model various alternatives for their chips at a system level.
- *LEDA* is our programmable coding and design guideline checker that enhance a designer’s ability to check a design for synthesizability, simulatability, testability and reusability.
- *Vera*® automates the creation of “testbenches,” or custom models that provide simulation inputs and respond to simulated outputs from the design during verification. Automating this process significantly reduces overall design and verification time. Vera is integrated with our other simulation products to provide increased productivity benefits.
- *Formality*® is our formal verification solution that compares two versions of a design to determine if they are equivalent. The use of formal verification reduces the need to perform simulation, which is substantially more time-consuming, thus potentially saving a significant amount of time in the overall design process.
- *Magellan*™ combines functional and formal verification technologies to allow engineers to find deep, corner-case software defects, or “bugs,” quickly during verification.
- *NanoSim*® is our advanced, transistor level circuit simulation and analysis product for digital, analog and mixed signal verification that offers circuit simulation, timing and power analysis in a single tool. NanoSim is a key component of Discovery AMS.
- *HSPICE*® offers high-accuracy, transistor-level circuit simulation enabling designers to better predict the timing, power consumption and functionality of their designs.

The Discovery Verification Platform also includes our Discovery AMS platform, a subset of the above technologies tuned to perform verification on analog and mixed analog-and-digital designs, and supports the latest Accellera SystemVerilog language standard, Verilog, VHDL, mixed-HDL, SystemC, and for analog mixed-signal based methodologies, Verilog-AMS and SPICE.

The increasing size and complexity of today’s ICs and SoCs have vastly increased the time and effort required to verify chip designs, with test creation and verification now consuming up to 70% of the total design time for a given IC. Our Discovery Platform combines our simulation and verification products and design-for-verification methodologies, and provides a consistent control environment to significantly improve the speed, breadth and accuracy of our customers’ verification efforts on complex chip designs, increasing their productivity and helping them deliver their products to market faster.

Solutions

Synopsys’ Solutions Group includes our portfolio of IP products and components and our Consulting Services Group.

Intellectual Property Products. As IC designs continue to grow in size, reusing proven design blocks is an increasingly important way to reduce overall design cost and cycle time. Enabling reuse of IP requires a significant methodology shift from traditional IC design. In the past, designs were intimately tied to a particular semiconductor process technology or design methodology, making reuse of design blocks from one chip design to the next both difficult and costly. More recently, IC companies have been able to increasingly reuse pre-designed and verified IP components, particularly those that implement basic or standardized functions. The ability to reuse such IP allows IC companies to focus their design teams on designing the chip features that will give its products a competitive advantage. Using pre-designed IP can also reduce a chip designer's verification risk by ensuring that the "designed in" portions of the chip are "pre-verified" and thus high quality. Because of the increasing importance of pre-designed IP, and in order to minimize the risk and effort in acquiring IP from a myriad of smaller suppliers, IC designers are beginning to consolidate their IP purchases from fewer vendors who can provide a reliable, comprehensive portfolio of proven IP.

Our IP products include:

- *DesignWare Foundation Library* is an extensive library of basic chip elements (for example, adders and multipliers) which Design Compiler uses in logic synthesis.
- *DesignWare Verification Library* is our library of popular chip function models used during the verification process of chip design.
- *DesignWare Cores* are pre-designed and pre-verified design blocks that implement many of the most important industry standards, including USB (1.1, 2.0 and On-The-Go), PCI (PCI, PCI-X and PCI Express), Ethernet and JPEG.

Finally, Synopsys' Star IP program permits DesignWare library users to gain access to popular microprocessor cores from leading semiconductor and IP companies. We have worked with these companies to improve the reusability of these microprocessor cores as well as to integrate them with other DesignWare microprocessor subsystems. The program includes cores from companies like MIPS, NEC and Infineon, and in 2003 we added a PowerPC microprocessor from IBM.

Professional Services. We provide a comprehensive portfolio of consulting services covering all critical phases of the SoC development process, as well as systems development in wireless and broadband applications. We offer customers a variety of engagement models ranging from project assistance, which helps our customers design, verify and/or test their chips and improve their design processes, to full turnkey development.

New Ventures

Our New Ventures Group includes a number of products and initiatives relating to analog/mixed signal IC design and verification and design for manufacturing.

Analog Mixed-Signal Tools. Our Cosmos™ tool is used to create analog designs. Cosmos uses schematic-driven layout to place and route full-custom ICs. The New Ventures Group also manages development and marketing of our NanoSim and HSPICE tools described above under *Discovery Verification Platform*.

Design for Manufacturing. With the acquisitions of Avant! and Numerical, we offer a variety of products and technologies used at the intersection of IC design and manufacturing which address a variety of issues, principally those encountered using photolithography techniques to manufacture ICs when advanced ICs have feature dimensions smaller than the wavelength of light used to expose those dimensions during production. We address these markets through our Design for Manufacturing initiatives, which include:

- *CATS®* is our mask data preparation product that takes a final IC design and "fractures" or "breaks" it into the physical features that will be included in the photomasks to be used in manufacturing.
- *Proteus OPC™/InPhase* are 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 design. OPC applies systematic changes to mask geometries to compensate for nonlinear 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.
- *SiVL® (Silicon versus Layout)* verifies the layout of a subwavelength IC against the silicon it is intended to produce by reading in the layout and simulating lithographic process effects, including optical, resist and etch effects.
- *Virtual Stepper* is our mask qualification product that checks mask quality and analyzes printability of mask defects, helping to separate true defects from nuisance defects.

Customer Service and Technical Support

We believe 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 groups. Customers who purchase Technology Subscription Licenses (TSLs) receive software maintenance services, also known as “post contract support” (PCS), 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 we develop, bug fixes and access to our technical support center for primary support. Software maintenance also includes access via electronic mail and the World Wide Web to SolvNet®, our web-based support solution that lets customers quickly seek answers to design questions or more insight into design problems. SolvNet gives customers access to Synopsys’ complete design knowledge database using sophisticated information retrieval technology. Updated daily, it includes documentation, design tips, and answers to user questions. Customers can also engage our application consultants, our worldwide network of product experts, for additional support needs.

Customer Education Services

We offer training workshops designed to increase customer design productivity while using our products. Workshops cover Synopsys tools and methodology used in our design and verification tool flows, as well as specialized modules addressing system design, logic design, physical design, simulation and test. We offer regularly scheduled workshops in Mountain View, California; Austin, Texas; Marlboro, Massachusetts; Reading, England; Rungis, France; Munich, Germany; Tokyo and Osaka, Japan; Seoul, Korea and other locations. We also schedule on-site workshops worldwide at our customers’ facilities or other locations. Approximately 8,500 engineers attended Synopsys workshops during fiscal 2003.

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.

Support for Industry Standards

We actively create and support standards we believe will help our customers increase productivity, improve interoperability of tools from different vendors, and solve design problems. Standards in the EDA industry can be established by formal accredited committees, by licensing made available to all, or through open source licensing.

Synopsys' products support many formal standards, including the most commonly used hardware description languages, VHDL, Verilog HDL, SystemVerilog and SystemC, as well as numerous industry standard data formats for the exchange of data between our tools, other EDA vendor's products and applications customers develop internally.

Synopsys is a board member and/or participant in the following major EDA standards organizations: Accellera, a not-for-profit formal standards organization that drives language-based standards for systems, semiconductor, and design tool companies; the interoperability committee of the EDA Consortium, which helps promote quality and interoperability among EDA products from different vendors; the Institute of Electrical and Electronics Engineers (IEEE), a non-profit, technical professional association and a leading developer of global industry standards; the Virtual Socket Interface Alliance (VSIA), an industry group formed to promote standards that facilitate the integration and reuse of functional blocks of intellectual property; and the Open SystemC Initiative (OSCI), a non-profit organization that manages SystemC, a language developed by Synopsys and donated to OSCI, with representation from the systems, semiconductor, IP, embedded software and EDA industries.

Synopsys' TAP-in program provides interface standards to all companies through an open source licensing model. Synopsys manages changes and enhancements that come from the community of licensees. Synopsys, other EDA companies and EDA customers use these standards to facilitate interoperability of their tools. The standards offered through TAP-in include Liberty for library modeling, SDC for design constraints, SAIF for switching activity and OpenVera for hardware verification. Synopsys' common database, Milkyway, is available for tool integration by EDA vendors through our MAP-in program.

Synopsys' products are written mainly in the C and C++ languages and utilize industry standards for graphical user interfaces. Our software runs under UNIX operating systems, such as Solaris and HP-UX, and under the RedHat Linux operating system. Synopsys' products are offered on the most widely used hardware platforms, including those from Sun Microsystems, Hewlett-Packard, IBM and PCs that are based upon Intel and AMD microprocessors.

Sales, Distribution and Backlog

We market our products and services primarily through direct sales and application engineers or support personnel in the United States and principal foreign markets. We employ highly skilled engineers and technically proficient sales persons in order to understand our customers' needs and explain and demonstrate the value of our products.

In fiscal 2003, 2002 and 2001, foreign revenues represented 43%, 35% and 37%, respectively, of Synopsys' total revenue. Additional information relating to domestic and foreign operations is contained in Note 9 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data*. Information relating to risks associated with foreign operations are described in Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors That May Affect Future Results—Stagnation of foreign economies, foreign exchange rate fluctuations or other international issues could adversely affect our performance*.

We have sales/support centers throughout the United States, in addition to our Mountain View, California headquarters. Outside the United States, we have sales/support 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, Switzerland, Taiwan and the United Kingdom. Our foreign headquarters is in Dublin, Ireland. Our offices are further described under Part I, Item 2, *Properties*.

In limited circumstances, we use distributors to assist us in the sale of certain products in specified markets. See Note 11 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data* for additional information about one of our distributors.

Historically, orders and revenue have been lowest in our first fiscal quarter and highest in our fourth fiscal quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year. We expect the first fiscal quarter will remain our lowest orders and revenue quarter; orders and revenue in other quarters will vary based on the particular timing and type of individual contracts entered into with large customers.

Synopsys' aggregate non-cancelable backlog was approximately \$1.6 billion on November 1, 2003, representing a 17% increase from the end of the prior fiscal year. Aggregate non-cancelable backlog includes deferred revenue, operational backlog and financial backlog and excludes all items relating to consulting services. Deferred revenue represents orders for software products, license maintenance and other services which have been delivered and billed to the customer but the revenue has not yet been earned. Operational backlog consists of orders for system and software products sold under perpetual or term licenses and TSLs with customer requested ship dates within three months which have not been shipped. Financial backlog consists of future installments to be billed and received from the customer not yet currently due and payable. In the case of a TSL, financial backlog includes the full amount of the committed non-cancelable order, less any amount of revenue that has been recognized on such TSL.

We have not historically experienced significant order cancellations.

Research and Development

Our future performance depends in large part on our ability to further integrate our design and verification platforms, maintain and enhance our current products, develop new products, and meet an expanding range of customer requirements. Research and development on existing and new products is primarily conducted within each business unit. Synopsys also maintains an Advanced Technology Group, which is responsible for exploring new technologies and maintaining strong research relationships outside Synopsys within both industry and academia.

During fiscal 2003, 2002 and 2001, research and development expenses, net of capitalized software development costs, were \$285.9 million, \$225.5 million and \$189.8 million, respectively. Synopsys capitalized software development costs were approximately \$2.6 million, \$1.6 million and \$1.0 million in fiscal 2003, 2002 and 2001, respectively. We anticipate that we will continue to commit substantial resources to research and development in the future.

Manufacturing

Synopsys' manufacturing operations consist of packaging and shipping CD-ROMs containing software products and the related documentation. We currently conduct these activities through contract vendors, who provide the majority of CD-ROM replication and on-demand printing and distribution of product media and documentation. We deliver an increasing proportion of our software products by electronic means rather than by shipping disks. When specified by the customer or required by law, Synopsys delivers disks to the customer's site. We typically deliver our software products within 10 days of acceptance of customer purchase orders and execution of software license agreements unless the customer requests otherwise.

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 on product quality and features, post-sale support, interoperability with other vendors' products, price, payment terms and, as discussed below, the ability to offer a complete design flow.

Our competitors include companies that offer a broad range of products and services, such as Cadence Design Systems, Inc. (Cadence) and Mentor Graphics Corporation, and companies that offer products focused on

a discrete phase or phases of the integrated circuit design process. During the recent semiconductor downturn, we have increasingly competed on the basis of payment terms and price. During fiscal 2003, we increasingly agreed to extended payment terms on our TSLs, negatively affecting our deferred revenue and cash flow from operations. In addition, in certain situations our competitors offer aggressive discounts on their products. As a result, average prices may fall, and we may lose potential business where we believe a given discount is not in our best interests.

Increasingly, EDA companies compete on the basis of design flows involving integrated logic and physical design products rather than on the basis of individual point tools performing a discrete phase of the design process. The need to offer an integrated design flow will become increasingly important as ICs grow more complex. While we have introduced design and verification platforms that integrate many of the products required to design an IC into a unified flow, we face significant competition from companies that also offer their own integrated design flows, such as Cadence and Magma Design Automation, Inc. To be successful in the future, we believe we must further integrate our design and verification products, which will continue to require significant engineering and development work. There can be no guarantee that we will be able to offer a competitive complete design flow to customers. If customers fail to adopt our design and verification platforms or if we are unable to develop new discrete design tools or enhance existing ones to add increased functionality or performance, our financial condition and results of operations will be materially and adversely affected.

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 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. License fees depend on the type of license, product mix and number of copies of each product licensed. In certain cases, customers have the right to use our products over a wide-area network or to exchange a portion of the software under license for different software products of equal value.

We currently offer our software products under three license types: renewable TSLs, renewable 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—Revenue Recognition* below.

With respect to our DesignWare Core intellectual property products, we typically license those products to our customers under nonexclusive license agreements which 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 professional services teams 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 a patent held by a Japanese electronics company. We believe this claim is without merit and will continue to vigorously pursue this defense.

These types of claims can 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.

Employees

As of November 1, 2003, Synopsys had 4,362 employees, of whom 2,885 were based in North America and 1,477 were based outside of North America. Our future financial results depend in part upon the continued service of our key technical and senior management personnel and our continuing ability to attract and retain highly qualified technical and managerial personnel. We participate in a dynamic industry, with start-up activity, and our headquarters is in Silicon Valley, where competition for the most highly skilled technical, sales and management employees is intense. Experience at Synopsys is highly valued in the EDA and general electronics industry, and our employees are recruited aggressively by our competitors and by start-up companies in many industries. We have periodically experienced significant employee turnover. We can provide no assurances that we can retain our key managerial and technical employees or continue to attract or retain additional highly qualified technical and managerial personnel in the future. None of our employees is represented by a labor union. We have experienced no work stoppages, and we believe our employee relations are good.

Item 2. Properties

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. Within one half mile of these buildings, in Sunnyvale, California, Synopsys occupies approximately 200,000 square feet of space in two adjacent buildings, which are under lease through April 2007, and approximately 72,000 square feet of space in a third building, which is under lease through April 2007. We use these buildings for administrative, marketing, research and development and support activities. In addition, Synopsys leases 16,000 square feet of space in Pleasanton and Fremont, California as telecommute centers. As a result of fiscal 2002 and 2003 acquisitions, we assumed leases of approximately 55,000 square feet of space in San Jose, California, 7,500 square feet of space in Pleasanton and 5,000 square feet of space in Austin, Texas, none of which we currently occupy.

Synopsys owns two buildings totaling approximately 230,000 square feet on approximately 43 acres of land in Hillsboro, Oregon, which we use 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 fourth building in Sunnyvale, California with approximately 120,000 square feet, which is leased to a third party through February 2009. Synopsys also owns 34 acres of undeveloped land in San Jose, California and 13 acres of undeveloped land in Marlboro, Massachusetts.

Synopsys currently leases 32 other offices throughout the United States primarily for sales and support.

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 34 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, Switzerland, Taiwan

and the United Kingdom. We also lease research and development facilities in Canada, France, Germany, India, Ireland, Japan, Korea, the Netherlands, the People's Republic of China, South Korea, Sweden, Taiwan and the United Kingdom.

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 is currently a party to various claims and legal proceedings which arise in the ordinary course of business. If management believes a loss arising from these actions is probable and can reasonably be estimated, we record the amount of the loss or the minimum estimated liability when the loss is estimated using a range and no point within the range is more probable than another. As additional information becomes available, we assess any potential liability related to these actions and revise our estimates, if necessary. Based on currently available information, management believes the ultimate outcome of these actions, individually and in the aggregate, will not have a material adverse effect on our financial position or overall trends in results of operations. However, litigation is inherently uncertain, and we could therefore receive unfavorable rulings. An unfavorable ruling could include monetary damages or an injunction prohibiting Synopsys from selling one or more products. An unexpected unfavorable ruling could have a material adverse impact on our results of operations for the period in which the ruling occurs or future periods.

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

No matters were submitted for a vote of security holders during the fourth quarter of fiscal 2003.

Executive Officers of the Registrant

The executive officers of Synopsys and their ages as of December 31, 2003, are:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Aart J. de Geus	49	Chief Executive Officer and Chairman of the Board of Directors
Chi-Foon Chan	54	President and Chief Operating Officer
Steven K. Shevick . .	47	Senior Vice President, Finance and Chief Financial Officer
Vicki L. Andrews . .	48	Senior Vice President, Worldwide Sales
Raul Camposano . . .	48	Senior Vice President and Chief Technology Officer
John Chilton	46	Senior Vice President and General Manager, Solutions Group
Janet S. Collinson . .	43	Senior Vice President, Human Resources and Facilities
Antun Domic	52	Senior Vice President and General Manager, Implementation Group
Manoj Gandhi	43	Senior Vice President and General Manager, Verification Group
Deirdre Hanford . . .	41	Senior Vice President, Worldwide Application Services
Sanjiv Kaul	45	Senior Vice President, New Ventures Group
Rex S. Jackson	43	Vice President, General Counsel and Corporate Secretary

Dr. Aart J. de Geus co-founded Synopsys and currently serves as Chief Executive Officer and Chairman of the Board of Directors. 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 joined Synopsys as Vice President of Application Engineering & Services in May 1990. Since April 1997 he has served as Chief Operating Officer and since February 1998 he has held the additional title of President. Dr. Chan also became a Director of Synopsys in 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 and from October 1996 until April 1997 as Acting Senior Vice President, Design Re-Use Group. Additionally, he has held the titles of Vice President, Engineering and General Manager, DesignWare Operations and Senior Vice President, Worldwide Field Organization. From March 1987 to May 1990, Dr. Chan was employed by NEC Electronics, where his last position was General Manager, Microprocessor Division. From 1977 to 1987, Dr. Chan held a number of senior engineering positions at Intel Corporation. Dr. Chan holds an M.S. and a Ph.D. in computer engineering from Case Western Reserve University.

Steven K. Shevick joined Synopsys in July 1995 and currently serves as Senior Vice President, Finance and Chief Financial Officer. Mr. Shevick was appointed Senior Vice President and Chief Financial Officer in January 2003. From October 1999 to January 2003, he was Vice President, Investor Relations and Legal and Corporate Secretary. From March 1998 to October 1999, he was Vice President, Legal, General Counsel and Assistant Corporate Secretary. From July 1995 to March 1998 he served as Deputy General Counsel and Assistant Corporate Secretary. Mr. Shevick holds an A.B. from Harvard College and a J.D. from Georgetown University Law Center.

Vicki L. Andrews joined Synopsys in May 1993 and currently serves as Senior Vice President, Worldwide Sales. Before holding that position, she served in a number of senior sales roles at Synopsys, including Vice President, Global and Strategic Sales, Vice President, North America Sales and Director, Western United States Sales. She has more than 18 years of experience in the EDA industry. Ms. Andrews holds a B.S. in biology and chemistry from the University of Miami.

Dr. Raul Camposano has served as Senior Vice President and Chief Technology Officer since September 2000. Prior to that time, he was our Senior Vice President, General Manager of the Design Tools Group from 1997 through September 2000. Prior to joining Synopsys in 1994, he directed the Design Technology Institute at the German National Research Center for Computer Science (GMD) and was a professor in the Department of Computer Science at the University of Paderborn, Germany. Between 1986 and 1991, Dr. Camposano worked at the IBM T.J. Watson Research Center. He was also a member of the research staff at the Computer Science Research Laboratory at the University of Karlsruhe. Dr. Camposano received a B.S.E.E. degree in 1977 and a diploma in electrical engineering in 1978 from the University of Chile and a Ph.D. in computer science from the University of Karlsruhe in 1981.

John Chilton has served as Senior Vice President and General Manager of the Solutions Group of Synopsys since August 2003. Prior to that time, he was our 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 an M.S.E.E. from the University of Southern California and a B.S.E.E. from University of California at Los Angeles.

Janet S. Collinson has served as Senior Vice President, Human Resources and Facilities since August 2003. From September 1999 to August 2003 she was our 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.

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 of Worldwide Applications Services since December 2002. Prior to that time, she was Senior Vice President, Business and Market Development of Synopsys 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 board of directors of Joint Venture Silicon Valley, an industry advocacy group, and the American Electronics Association's national board of directors.

Sanjiv Kaul has served as the Senior Vice President of the New Ventures Group since July 2003. Prior to that he was Senior Vice President of Corporate Applications and Marketing from October 2002 to July 2003. From 1998 until July 2003, Mr. Kaul headed our IC Implementation business unit. He joined Synopsys in April 1995. Mr. Kaul holds a B.S. degree from the University of Delhi, India and a B.S.E.E. from the University of Maryland. He has also done graduate work at Santa Clara University.

Rex S. Jackson joined Synopsys in February 2003 as Vice President, General Counsel and Corporate Secretary. Prior to joining Synopsys, Mr. Jackson was an investment director with Redleaf Group, Inc., an early stage venture capital firm, from April 2000 through December 2001, and President and CEO of Atlantes Services, Inc., a Redleaf portfolio company, from December 2001 through February 2003. Prior to joining Redleaf, from August 1998 to April 2000, Mr. Jackson was Vice President and General Counsel of AdForce, Inc., a provider of ad management and delivery services on the Internet. Prior to joining AdForce, Mr. Jackson served as Vice President, Business Development and General Counsel of Read-Rite Corporation, a manufacturer of thin film recording heads for the disk and tape drive industries from 1996 to 1998 and as Vice President and General Counsel from 1992 to 1996. Mr. Jackson holds an A.B. degree from Duke University and a J.D. degree from Stanford University.

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

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The table below sets forth information regarding repurchases of Synopsys common stock by Synopsys during the fiscal quarter ended October 31, 2003.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Programs
Month #1 August 3, 2003 through September 6, 2003 . . .	1,088,610	\$31.3214	1,088,610	\$239,254,000
Month #2 September 7, 2003 through October 4, 2003 . . .	—	\$ —	—	—
Month #3 October 5, 2003 through November 1, 2003 . . .	—	\$ —	—	—
Total	<u>1,088,610</u>	\$31.3214	<u>1,088,610</u>	<u>\$239,254,000</u>

All shares were purchased pursuant to a \$500 million stock repurchase program approved by Synopsys' Board of Directors on December 9, 2002. Effective December 3, 2003, the Board of Directors renewed the program and increased the authorized funds to \$500 million, not including amounts expended prior to such date. 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 13 of our *Notes to Consolidated Financial Statements* in Part II, Item 8, *Financial Statements and Supplementary Data*.

Item 6. Selected Financial Data

Financial Summary

	Fiscal Year Ended ⁽¹⁾				
	October 31,				September 30,
	2003	2002	2001	2000	1999
	<i>(in thousands, except per share data)</i>				
Revenue	\$1,176,983	\$ 906,534	\$ 680,350	\$ 783,778	\$ 806,098
Income (loss) before income taxes and extraordinary items ⁽²⁾	218,989	(288,940)	83,533	145,938	251,411
Provision (benefit) for income taxes	69,265	(88,947)	26,731	48,160	90,049
Net income (loss)	149,724	(199,993)	56,802	97,778	161,362
Earnings (loss) per share ⁽³⁾ :					
Basic	0.99	(1.50)	0.47	0.71	1.15
Diluted	0.95	(1.50)	0.44	0.69	1.10
Working capital	434,247	151,946	254,962	331,857	627,207
Total assets	2,307,353	1,978,714	1,128,907	1,050,993	1,173,918
Long-term debt	7,219	6,547	73	564	11,642
Stockholders' equity	1,433,410	1,113,481	485,656	682,829	865,596

- (1) Synopsys has a fiscal year that ends on the Saturday nearest October 31. Fiscal 2003, 2002, 2000 and 1999 were 52-week years while fiscal 2001 was a 53-week year. For presentation purposes, the consolidated financial statements refer to the calendar month end. Prior to fiscal 2000, Synopsys' fiscal year ended on the Saturday nearest to September 30. The period from October 1, 1999 through October 31, 1999 was a transition period. During the transition period, revenue, loss before income taxes, benefit for income taxes and net loss were \$23.2 million, \$25.5 million, \$9.9 million, and \$15.5 million, respectively, and basic and diluted loss per share was \$0.11. The net loss during the transition period is due to the fact that sales in the first month following a quarter end are historically lower than in the second and third months. As of October 31, 1999, working capital, total assets, long-term debt, and stockholders' equity were \$621.9 million, \$1.2 billion, \$11.3 million and \$872.6 million, respectively.
- (2) Includes charges of \$19.9 million, \$87.7 million, \$1.7 million and \$21.2 million for fiscal 2003, 2002, 2000, and 1999, respectively, for in-process research and development. Fiscal 2002 includes merger-related and other costs of \$128.5 million and insurance premium costs of \$335.8 million related to the Avant! merger.
- (3) 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

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related "Notes to Consolidated Financial Statements" in Item 8, and "Financial Statements and Supplementary Data" in this Annual Report on Form 10-K. This discussion contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. 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, including the risk factors set forth in this discussion, especially under the caption "Factors That May Affect Future Results," and elsewhere in this Form 10-K. Generally, the words "may," "will," "could," "would," "anticipate," "expect," "intend," "believe," "continue," or the negatives of such terms, or other comparable terminology and similar expressions identify forward-looking statements. The information included in this Form 10-K is as of the filing date with the Securities and Exchange Commission and future events or circumstances could differ significantly from the forward-looking statements included herein. Accordingly, we caution readers not to place undue reliance on such statements.

Overview

The following is a summary of the discussion of our financial condition and results of operations and is qualified in its entirety by the fuller discussion contained in this Item 7. This summary should be read in conjunction with Part I, Item 1, "Business" and is qualified in its entirety by the risk factors set forth in Item 7 as described below under "Factors That May Affect Future Results."

Synopsys is the world leader in electronic design automation (EDA) software used to design complex integrated circuits (ICs) and systems-on-chips (SoCs) in the global semiconductor and electronics industries. Our software and intellectual property products and design services provide a complete IC design and verification solution from original concept to the actual chip, enabling our customers to bring advanced products to market quickly. See "Item 1, Business" for a more complete description of our business.

Business Environment

As an EDA software provider, we generate substantially all of our revenues from the semiconductor and electronics industries. Our customers typically fund purchases of our software and services out of their research and development budgets. As a result, our revenues are heavily influenced by our customers' long-term business outlook, and willingness to invest in new chip designs.

Beginning in late calendar 2000, the semiconductor industry entered its steepest and longest downturn of the past 20 years, with industry sales dropping by approximately 46% from late 2000 to early 2002. As a result, over the past three years our customers have focused on controlling costs and reducing risk, including constraining R&D expenditures, cutting back on their design starts, purchasing from fewer suppliers, requiring more favorable pricing and payment terms from those suppliers and pursuing consolidation within their own industry. Further, during this downturn, many start-up semiconductor design companies failed or were acquired, and the pace of investment in new companies declined.

In response to these conditions, we have focused on providing the most technologically advanced products to address each step in the IC design process, on integrating these products into broad platforms, and on expanding our product offerings. Our goal is to be the EDA technology supplier of choice for our customers as they pursue longer-term, broader, more flexible relationships with fewer suppliers. Reflecting this trend, in fiscal 2003 we signed 11 new contracts over \$25 million, up from only three in fiscal 2001.

While the semiconductor industry experienced a moderate recovery in 2003, our customers have remained cautious. It is therefore not yet clear when improved demand in our own customers' electronics end markets will cause them to significantly increase their R&D spending or their design starts, and hence their spending on EDA.

Product Developments

As the result of a multi-year strategy based upon focused internal development efforts and selective acquisitions, we offer our customers a comprehensive, end-to-end design flow. Our suite of system design, logic design, functional verification, physical design and physical verification products enables our customers to take an IC from concept all the way to manufacturing.

Following the completion of the Avant! merger in mid-2002, we moved quickly to integrate our operations and research and development teams. We have also pursued integration of the products themselves. In February 2003, we announced the combination of many of our leading IC design products into a single, unified platform called the Galaxy Design Platform, which now includes seven of our twelve highest revenue products: Design Compiler, Apollo/Astro, Physical Compiler, PrimeTime, Hercules, STAR-RCXT and DFT Compiler. Concurrently with this announcement, we also opened access to our Milkyway design database, which provides a common data repository and improves interoperability among multiple products. Enabling customers and other EDA tool vendors to link their tools directly into the Milkyway environment will benefit customers and other EDA companies by reducing integration costs and advancing tool interoperability for the electronics industry.

We also announced our Discovery Verification Platform in fiscal 2003, which combines many of our verification and nanometer level analysis tools in a unified environment to provide high performance and efficient interaction among these technologies, and includes three of our twelve highest revenue products: VCS, HSPICE and NanoSim.

Finally, in March 2003 we completed our acquisition of Numerical Technologies, Inc., which specializes in sub-wavelength photolithography-enabling solutions, expanding our offerings of manufacturing technologies and products geared towards small geometry designs.

Financial Performance

- Our revenue for fiscal 2003 was \$1,177.0 million, a 30% increase over fiscal 2002, reflecting the first full year of contribution from our mid-fiscal 2002 Avant! acquisition and the continued phase-in of our time-based licenses.
- During fiscal 2003, we continued to emphasize licenses on which we recognize revenue over time rather than upfront upon shipment. Time-based license revenue for fiscal 2003 increased 65% to \$618.0 million, as compared to \$373.6 million in fiscal 2002. Upfront license revenue increased 22% to \$298.3 million, as compared to \$245.2 million in fiscal 2002. On a percentage basis, time-based and upfront license revenue constituted 67% and 33%, respectively, of software license revenues in fiscal 2003, as compared to 60% and 40%, respectively, in fiscal 2002.
- Our maintenance revenue for fiscal 2003 was \$220.0 million, down 5% from fiscal 2002 maintenance revenue of \$232.7 million, reflecting the impact of including maintenance with our Technology Subscription Licenses, lower maintenance fees on certain perpetual licenses and generally lower renewal rates.
- Demand for third party professional services continued to be soft in fiscal 2003. As a result, our services revenues for fiscal 2003 were \$40.7 million, down 26% from fiscal 2002 services revenue of \$55.1 million.
- In our four key geographies, North America, Europe, Japan and Asia Pacific, year-to-year revenue increased 13%, 26%, 128% and 45%, respectively.
- Fiscal 2003 net income was \$149.7 million, versus a fiscal 2002 net loss of (\$200.0 million). The loss incurred in 2002 was largely driven by the costs associated with the Avant! acquisition we completed in June 2002. Litigation expense totaled \$265.0 million, integration expenses were \$128.5 million and in-process research and development expenses totaled \$82.5 million.

- Cash provided by operations in fiscal 2003 was \$391.5 million, compared to cash used by operations in fiscal 2002 of (\$181.0 million). The change in cash flow was driven by the cash used for expenses associated with the Avant! acquisition. At year end, our cash, cash equivalents and short-term investments were \$698.4 million, up 68% from \$414.7 million at the end of fiscal 2002.
- In September 2003, we completed a two-for-one split of our common stock in the form of a stock dividend.
- During fiscal 2003, we repurchased, on a post-split basis, 9,407,324 shares of our Common Stock at an average price of \$27.72 per share, for a total of \$260.7 million. In December, after the end of our fiscal year, our Board renewed the stock buyback program, authorizing up to \$500 million in additional share repurchases.

Acquisitions

In fiscal 2003, we completed (i) our acquisition of Numerical Technologies, Inc. (Numerical) to expand our offerings of design for manufacturing products and (ii) two other acquisitions we do not consider material for financial statement purposes.

In fiscal 2002, we acquired: (i) Avant! Corporation (Avant!), a leading developer of software used in the physical design and physical verification phases of IC design; (ii) Co-Design Automation, Inc. (Co-Design), a developer of simulation software used in the high-level verification stage of the chip design process; and (iii) inSilicon Corporation (inSilicon), which developed, marketed and licensed an extensive portfolio of silicon intellectual property.

Our results of operations include the revenues attributable to products acquired in these mergers that are recognized after the respective merger dates but not any revenues recognized by these acquired companies prior to their respective merger dates. In addition, these acquisitions caused us to incur charges related to these acquisitions, such as amortization of goodwill, intangible assets and deferred stock compensation, and integration, as more fully discussed below.

Critical Accounting Policies

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 accounting principles generally accepted in the United States of America. 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;
- Allowance for doubtful accounts; and
- Strategic investments.

Revenue Recognition. Our revenue recognition policy is detailed in Note 2 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data*. We have designed and implemented revenue recognition policies in accordance with Statement of Position (SOP) 97-2, *Software Revenue Recognition, as amended by SOP 98-9, Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions*, and SOP 98-4, *Deferral of the Effective Date of a Provision of SOP 97-2, Software Revenue Recognition*.

With respect to software sales, Synopsys utilizes three license types:

- Technology Subscription Licenses (TSLs), which are for a finite term, on average approximately three years, and generally provide the customer limited rights to receive, or to exchange certain quantities of licensed software for, unspecified future technology. Post-contract customer support (maintenance or PCS) is bundled for the term of the license and not charged for separately.
- Term licenses, which are also for a finite term, usually two to three years, 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, which 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. The annual maintenance fee for purchases under \$2 million is typically calculated as a percentage of the list price of the licensed software; for purchases over \$2 million, the annual maintenance fee is typically calculated as a percentage of the net license fee.

We report revenue in three categories: upfront license revenue, time-based license revenue and services.

Upfront license revenue includes:

- Perpetual licenses. We recognize the perpetual license fee in full if, upon shipment of the software, payment terms require the customer to pay at least 75% of the perpetual license fee within one year from shipment.
- Upfront term licenses. We recognize the term license fee in full if, upon shipment of the software, payment terms require the customer to pay at least 75% of the term license fee within one year from shipment.

Time-based license revenue includes:

- Technology Subscription Licenses. We typically recognize revenue from TSL license fees (which include bundled maintenance) ratably over the term of the license period. However, where extended payment terms (as discussed below) are offered under the license arrangement, we recognize revenue from TSL license fees in an amount that is the lesser of the ratable portion of the entire fee or customer installments as they become due and payable.
- Term Licenses with Extended Payment Terms. For term licenses where 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.

Services revenue includes:

- Maintenance Fees Associated with Perpetual and Term Licenses. We generally recognize revenue from maintenance associated with perpetual and term licenses ratably over the maintenance term.

- Consulting and Training Fees. We generally recognize revenue from consulting and training services as services are performed.

We allocate revenue on software transactions (referred to as an “arrangement” in the accounting literature) involving multiple elements to each element based on the relative fair values of the elements. 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 the same element is sold separately.

We have analyzed all of the elements included in our multiple-element arrangements and determined that we have sufficient VSOE to allocate revenue to the maintenance components of our perpetual and term license products and to consulting. Accordingly, assuming all other revenue recognition criteria are met, we recognize revenue from perpetual and term licenses upon delivery using the residual method in accordance with SOP 98-9 and recognize revenue from maintenance ratably over the maintenance term.

Customers occasionally request the right to convert their existing TSLs to perpetual licenses. Customers pay an incremental fee to convert the TSL to a perpetual license, which we recognize upon contract signing, in accordance with AICPA Technical Practice Aid (TPA) 5100.74, assuming all other revenue recognition criteria have been met. In some situations, the contract converting the TSL to a perpetual license is modified to such an extent that a new arrangement exists. The changes to the contract may include increases or decreases in the total technology under license, changes in payment terms, changes in license terms and other pertinent factors. In these situations, we account for all of the arrangement fees as a new sale and recognize revenue when all other revenue recognition criteria have been met. We have a policy that defines the specific circumstances under which such transactions are accounted for as a new perpetual license sale.

We make significant judgments related to revenue recognition. Specifically, in connection with each transaction involving our products, we must evaluate whether: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) our fee is fixed or determinable, and (iv) collectibility is probable. We apply these criteria as discussed below.

- Persuasive Evidence of an Arrangement Exists. We require 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 volume purchase agreement with us prior to recognizing revenue on an arrangement.
- Delivery Has Occurred. We deliver software to our customers physically or electronically. For physical deliveries, our standard transfer terms are typically FOB shipping point. For electronic deliveries, delivery occurs when we provide the customer access codes or “keys” that allow the customer to take immediate possession of the software on its hardware.
- 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. Where these terms apply, we regard the fee as fixed or determinable, and we recognize revenue upon delivery (assuming other revenue recognition criteria are met). If the payment terms do not meet this standard, which we refer to as “extended payment 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 application of other revenue accounting guidelines.
- Collectibility is Probable. To recognize revenue, we must judge collectibility of the arrangement fees, which we do 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, 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 based upon our credit review process or the customer's payment history, we recognize revenue on a cash-collected basis.

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 tradenames, covenants not to compete, customer backlog and capitalized software. 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 acquired entity or technology over the remaining amortization period, we will 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 statements. We did not record any impairment charges on our intangible assets during fiscal 2003. As of October 31, 2003, the carrying amount of our intangible assets, net was \$285.6 million.

We evaluate goodwill on a quarterly basis for indications of impairment based on our fair value as determined by our market capitalization in accordance with Statement of Financial Standards No. 142 (SFAS 142), *Goodwill and Other Intangible Assets*. If this evaluation indicates that the value of the goodwill may be impaired, we make an assessment of the impairment of the goodwill using the two-step method prescribed by SFAS 142. Any such impairment charge could be significant and could have a material adverse effect on our reported financial statements. We did not record any impairment charges on our goodwill during fiscal 2003. As of October 31, 2003, the carrying amount of our goodwill, net was \$550.7 million.

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, 2003, current net deferred tax assets and long-term liabilities totaled \$248.4 million and \$7.4 million, respectively. 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 charge to income an adjustment to the deferred tax assets in the period we make that determination.

We provide for United States (U.S.) income taxes on the earnings of our foreign subsidiaries unless they are considered permanently invested outside of the United States. As of October 31, 2003, the cumulative amount of earnings upon which United States income taxes have not been provided is approximately \$176.7 million. As of October 31, 2003, the unrecognized deferred tax liability for these earnings was approximately \$49.1 million.

Allowance for Doubtful Accounts. We estimate the collectibility of accounts receivable on an account-by-account basis and establish a specific reserve for any particular receivable when we determine collectibility is not probable. In addition, we provide a general reserve on all accounts receivable, which we calculate as a percentage, determined within a specified range of percentages of the outstanding balance in each aged group. In determining this percentage, we specifically analyze accounts receivable and historical bad debt expense, customer creditworthiness, current economic trends, international exposures (such as currency devaluation), and changes in our customer payment terms to evaluate the adequacy of the allowance for doubtful

accounts. If the financial condition of our customers deteriorates, impairing their ability to make payments, we may need to establish additional allowances. As of October 31, 2003, our allowance for doubtful accounts was \$8.3 million.

Strategic Investments. We review our investments in non-public companies on a quarterly basis and estimate the amount of any impairment incurred during the current period based on a specific analysis of each investment, considering the activities of and events occurring at each of the underlying portfolio companies during the quarter. Our portfolio companies operate in industries that are rapidly evolving and extremely competitive. For equity investments in non-public companies where we cannot readily determine market value, we assess each investment for indicators of impairment at each quarter end based primarily on achievement of business plan objectives and current market conditions, among other factors, and information available to us at the time of assessment. The primary business plan objectives we consider include achievement of planned financial results, completion of capital raising activities, the launching of technology, the hiring of key employees and the portfolio company's overall progress on its business plan. If we determine an investment in a portfolio company is impaired, absent quantitative valuation metrics, management estimates the impairment and/or the net realizable value of the portfolio investment based on public- and private-company market comparable information and valuations completed for companies similar to our portfolio companies. Future adverse changes in market conditions, poor operating results of underlying investments and other information obtained after our quarterly assessment could result in additional losses or an inability to recover the current carrying value of the investments thereby requiring a further impairment charge in the future. As of October 31, 2003, we valued our strategic investments at \$8.6 million.

Results of Operations

Synopsys generates revenue primarily from licensing its software and intellectual property, from sales of maintenance, and from providing consulting services. In our licensing activities, to respond to our customers' respective technology, flexibility and budget requirements, we have offered a variety of license types. We generally classify those license types as TBLs on which revenue is recognized over time, and upfront licenses on which revenue is recognized at the time of product shipment. These license types vary significantly in terms of access to technology, duration, flexibility and payment terms. See *Critical Accounting Policies—Revenue Recognition* above for a full discussion of our types of licenses and services and the revenue recognition associated with each.

Prior to the fourth quarter of fiscal 2000, we principally licensed our software via perpetual licenses and upfront term licenses, with the license revenue typically recognized upfront at the time the order was received and maintenance recognized ratably over the maintenance term. In the fourth quarter of fiscal 2000, we introduced Time Subscription Licenses. Since we bundle products and maintenance in TSLs, we generally recognize both product and service TSL revenue ratably over the term of the license, or, if later, as payments become due. As a result, a TSL order results in significantly lower current-period revenue than an equal-sized order for a perpetual or upfront term license. Conversely, a TSL order will result in higher revenues recognized in future periods than an equal-sized order for a perpetual or upfront term license. For example, for a \$120,000 order for a perpetual or upfront term license, we recognize \$120,000 of revenue in the quarter the product is shipped and no revenue in future quarters. For a \$120,000 order for a 3-year TSL shipped on the first day of the quarter, we recognize \$10,000 of revenue in the quarter the product is shipped and in each of the 11 succeeding quarters.

Because we generally recognize revenue on TSLs ratably over the TSL term, our reported revenue dropped significantly following our adoption of TSLs in the fourth quarter of fiscal 2000. In each quarter since adoption, however, our ratable revenue has grown as TSL orders we receive each quarter contribute revenue that is "layered" over the revenue ratably recognizable from TSL orders we received in prior quarters. As the TSL model matures, growth in ratable revenue in any quarter will depend on revenue derived from new TSL orders

received in the quarter, offset by the loss of revenue from TSLs that expire in such quarter or the prior quarter, which cease to contribute to revenue. Due to the “layering” effect, revenue may grow from quarter to quarter for some time even if orders do not grow. The complete phase-in period of the TSL model is difficult to predict, as it is affected by mergers and acquisitions and by the precise mix of TSL orders received. We expect, however, that when the TSL model is fully phased in over the long term, revenue growth should track orders growth on a percentage basis.

Our license revenue in any given quarter depends upon the volume of upfront licenses shipped during the quarter, the amount of TBL revenue recognized from TBLs booked in prior periods, and to a much smaller degree, the amount of revenue recognized on TBL orders booked during the quarter. We set our revenue targets based in large part on orders targets and our expected mix of perpetual licenses, term licenses and TSLs for a given period. If we achieve the total order target but not our target license mix, we may not reach our revenue targets (if upfront license orders are lower than we expect), or may exceed them (if upfront license orders are higher than we expect). If we achieve the target license mix but orders are below target, then we will not meet our revenue targets.

The precise mix of orders can fluctuate substantially from quarter to quarter. Our historical license order mix since adopting TSLs in August 2000 has been 24% upfront licenses and 76% time-based licenses, although the percentage of upfront license orders in any given quarter has been as high as 33% and as low as 14%. The license mix for the fourth quarter of fiscal 2003 was 33% upfront and 67% time-based as compared to 27% upfront and 73% time-based for the same period in fiscal 2002.

Revenue. Revenue consists of fees for upfront and time-based licenses of our software and intellectual property products, maintenance, customer training and consulting. We classify revenue as upfront license, time-based license or services. Upfront license revenue consists primarily of perpetual and upfront term software licenses. Time-based license revenue consists of revenue from our TSLs and from term licenses which have extended payment terms as discussed above. Service revenue consists of maintenance under perpetual and term licenses and fees for consulting services and training.

Total revenue for fiscal 2003 increased 30% to \$1,177.0 million as compared to \$906.5 million in fiscal 2002. The increase in total revenue for fiscal 2003 is primarily due to (i) contribution of Avant! products for a full fiscal year, (ii) continued phase-in of the TSL model and (iii) license renewals with many of our largest Japanese customers in the second quarter of fiscal 2003, a relatively high proportion of which were perpetual licenses. In the fourth quarter of fiscal 2003, we reintroduced term licenses. Total revenue from term licenses in fiscal 2003 was \$3.6 million.

Total revenue for fiscal 2002 increased 33% to \$906.5 million as compared to \$680.4 million for fiscal 2001. The increase in total revenue for fiscal 2002 as compared to fiscal 2001 is due primarily to the contribution of Avant! products from June 2002 through the end of fiscal 2002 and to the ongoing phase in of the TSL license model.

Upfront license revenue for fiscal 2003 increased 22% to \$298.3 million as compared to \$245.2 million in fiscal 2002. The increase in upfront license revenue is primarily due to the contribution of Avant! products for a full fiscal year and license renewals with many of our largest Japanese customers in the second quarter of fiscal 2003, a relatively high proportion of which were perpetual licenses. During the second quarter of fiscal 2002, we began offering to some of our customers that entered into perpetual licenses in excess of \$2 million variable maintenance arrangements under which the annual maintenance fee is calculated as a percentage of the net license fee rather than as a fixed percentage of the list price. These arrangements accounted for \$220.0 million of our product sales in fiscal 2003 as compared to \$131.6 million in fiscal 2002.

Upfront license revenue for fiscal 2002 increased 50% to \$245.2 million as compared to \$163.9 million for fiscal 2001. The increase in upfront license revenue for fiscal 2002 as compared to fiscal 2001 was due to an

increase in perpetual licenses delivered during the period, which resulted in large part from the increased volume of perpetual licenses after the Avant! merger.

Time-based license revenue for fiscal 2003 increased 65% to \$618.0 million as compared to \$373.6 million in fiscal 2002. The increase in time-based license revenue is due to the additional quarters that the TSL license model has been used and to the increased volume of time-based license sales contributed by Avant! products for a full fiscal year.

Time-based license revenue for fiscal 2002 increased 114% to \$373.6 million as compared to \$174.6 million in fiscal 2001. The increase in ratable license revenue for fiscal 2002 compared to fiscal 2001 was due to the additional quarters that the TSL license model has been used and to the increased volume of ratable license sales resulting from the Avant! merger.

Service revenue for fiscal 2003 decreased 9% to \$260.7 million as compared to \$287.7 million in fiscal 2002. Service revenue for fiscal 2002 decreased 16% to \$287.7 million as compared to \$341.8 million for fiscal 2001. These decreases in service revenue were primarily due to the impact of our adoption of TSLs, which bundle maintenance with the software and do not contribute any separately recognized service revenue. Further, economic conditions led our customers to reduce their costs by curtailing their use of outside consultants such as our professional services personnel, and, in some cases, discontinuing maintenance on their perpetual licenses. In addition, customers deferred or cancelled a number of projects in our consulting backlog and reduced certain expenditures on training. And finally, our adoption of variable maintenance perpetual arrangements in fiscal 2002 has substantially lowered our maintenance fees from perpetual licenses.

Related Party Transactions. Revenues derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 9.5% and 7.9% of fiscal 2003 and 2002 revenues, respectively. Andy D. Bryant, Intel Corporation's Executive Vice President and Chief Financial and Enterprise Services Officer, also serves on our Board of Directors. Management believes the transactions between the two parties were carried out on an arm's length basis.

Revenue Seasonality. Historically, orders and revenue have been lowest in our first fiscal quarter and highest in our fourth fiscal quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year. We expect the first fiscal quarter will remain our lowest orders and revenues quarter; orders and revenues in other quarters will vary based on the particular timing and type of individual contracts entered into with large customers.

Revenue—Product Groups. For management reporting purposes, we organize our products and services into five distinct groups: Galaxy Design Platform, Discovery Verification Platform, Intellectual Property (IP), New Ventures and Professional Services & Other. The following table summarizes the revenue attributable to these groups as a percentage of total revenue for the last twelve quarters. 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, which represented approximately 18% of our total revenue and approximately 84% of our total services revenue for fiscal 2003, to the products to which those support services relate. Further, with the adoption of our platform strategy in fiscal 2003, we redefined our product groups and have reclassified prior period revenues in accordance with this new grouping to provide a consistent presentation.

Between any two quarters, the percentage of our total revenue from each group fluctuates based on the mix of upfront versus time-based orders received for these products during the quarter. Further, since our adoption of TSLs in the fourth quarter of fiscal 2000, an increasing percentage of the revenue in a given quarter in the Galaxy Design Platform, Discovery Verification Platform and New Ventures groups is from customer orders placed in preceding quarters. Accordingly, for the Galaxy Design Platform, Discovery Verification Platform and New Ventures groups, quarter-to-quarter changes are not necessarily indicative of fundamental strength or weakness in those groups.

	Fiscal 2003				Fiscal 2002				Fiscal 2001			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue												
Galaxy Design Platform . .	62%	64%	70%	65%	68%	65%	61%	60%	59%	56%	54%	55%
Discovery Verification												
Platform	22	20	19	22	20	20	21	24	23	23	22	21
IP	7	8	5	6	5	5	9	8	9	10	9	10
New Ventures	5	5	4	3	3	4	—	—	—	—	—	—
Professional Services &												
Other	4	3	2	4	4	6	9	8	9	11	15	14
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Galaxy Design Platform. Our Galaxy Design Platform includes our logic synthesis, physical synthesis, physical design, timing analysis, signal integrity analysis and physical verification products. Our principal products in this category at October 31, 2003 were Design Compiler, Apollo, Astro, Physical Compiler, Prime Time, Hercules, Star RXCT and DFT Compiler.

Revenue for this platform increased significantly in percentage and absolute dollar terms following the Avant! merger in the third quarter of fiscal 2002, primarily because this product group represented the largest portion of Avant!'s revenue before the acquisition. The percentage increase in the second quarter of fiscal 2003 was due to a number of large orders, many of which were perpetual licenses, by Japanese customers in that quarter. Going forward, we believe physical implementation, physical synthesis and design analysis products will account for an increasing share of Galaxy Design Platform revenues relative to our logic synthesis products as customers recognize the importance of using physical level and design analysis tools to address design challenges particular to small geometry designs.

Discovery Verification Platform. Our Discovery Verification Platform includes our verification and simulation products. Our principal products in this category are VCS, HSPICE, NanoSim, Formality, Vera and System Studio. Though the Avant! merger added few verification products, revenue for this platform as a percentage of total revenue has remained fairly consistent, reflecting continued adoption of these tools by our customers. In absolute dollar terms, revenue from this platform has generally increased consistently with our overall averages.

Intellectual Property. Our IP products include the DesignWare library of IC design components and verification models and inSilicon products we acquired in September 2002. IP revenue as a percentage of total revenue decreased beginning in the third quarter of fiscal 2002 principally because we acquired few IP products in the Avant! merger, but increased beginning in the third quarter of fiscal 2003 due to increased sales of our DesignWare cores and products acquired in the inSilicon merger, particularly in the communications and connectivity areas.

New Ventures. Our New Ventures products include our analog and mixed signal and design for manufacturing tools. We had no revenue from these tools prior to the third quarter of fiscal 2002, when we acquired Avant!. New Ventures revenue as a percentage of total revenue has since increased moderately primarily as a result of the growing need for tools and methodologies required for smaller geometry designs, and has increased in absolute dollar terms consistently with our overall averages.

Professional Services & Other. The Professional Services Group provides consulting services, including design methodology assistance, specialized systems design services, turnkey design and training. As a percentage of total revenue, revenue from this product group declined significantly through the second quarter of fiscal 2003, reflecting a decrease in consulting orders from our customers due to difficult economic conditions as discussed above under *Revenue*, and the fact that Avant! did not have a significant professional services business.

Workforce Realignment. During the fourth quarter of fiscal 2003, we decided to realign our operations, effective in the first quarter of fiscal 2004, in order to focus resources on more strategic areas of investment and to become more operationally efficient. This realignment affected a total of approximately 240 employees (140 in the U.S. and 100 outside the U.S.) in all departments in domestic and foreign locations. The associated charge for fiscal 2003 was \$14.9 million consisting of severance and other termination benefits, which are generally much higher in locations outside the U.S., and is reflected in the consolidated statement of income as follows:

	Year Ended October 31,	
	2003	2002
	<i>(in thousands)</i>	
Cost of revenue	\$ 2,569	\$—
Research and development	6,270	—
Sales and marketing	4,847	—
General and administrative	1,170	—
Total	<u>\$14,856</u>	<u>\$—</u>

We expect to incur additional costs between \$3 million and \$4 million during the first and second quarters of fiscal 2004 related to the consolidation of excess facilities and to the termination of certain lease obligations.

Temporary Shutdown of Operations. During the third quarter of fiscal 2003, we had a four-day shutdown of operations in North America as a cost-saving measure. The savings relates primarily to salaries and benefits as follows:

	Year Ended October 31,	
	2003	2002
	<i>(in thousands)</i>	
Cost of revenue	\$ 874	\$—
Research and development	617	—
Sales and marketing	1,925	—
General and administrative	1,379	—
Total	<u>\$4,795</u>	<u>\$—</u>

Work Force Reduction. We reduced our workforce during the first quarter of fiscal 2003 and the second quarter of fiscal 2002. The purpose was to reduce expenses by decreasing the number of employees in all departments in domestic and foreign locations. As a result, we decreased our workforce by approximately 200 and 175 employees during the first quarter of fiscal 2003 and the second quarter of fiscal 2002, respectively. The associated charge for fiscal 2003 was \$4.4 million as compared to \$3.9 million for fiscal 2002. The charge consists of severance and other termination benefits and is reflected in the consolidated statements of income as follows:

	Year Ended October 31,	
	2003	2002
	<i>(in thousands)</i>	
Cost of revenue	\$1,167	\$ 678
Research and development	1,388	1,081
Sales and marketing	1,239	1,078
General and administrative	630	1,033
Total	<u>\$4,424</u>	<u>\$3,870</u>

Cost of Revenue. Cost of revenue consists of the cost of product revenue, cost of service revenue, cost of ratable license revenue and amortization of intangible assets and deferred stock compensation. Cost of product revenue includes personnel and related costs, production costs, product packaging, documentation and

amortization of capitalized software development costs and purchased technology. Cost of service revenue includes consulting services, personnel and related costs associated with providing training and maintenance on perpetual and term licenses. Cost of ratable license revenue includes the costs of product and services related to our TSLs. Cost of product revenue, cost of service revenue and cost of ratable license revenue during any period are heavily dependent on the mix of software orders received during such period.

Cost of revenue amortization of intangible assets and deferred stock compensation includes the amortization of the contract rights intangible associated with certain executory contracts and the amortization of core/developed technology related to acquisitions which occurred in fiscal 2003 and 2002. There was no cost of revenue amortization of intangible assets and deferred stock compensation in fiscal 2001. Total amortization of intangible assets and deferred stock compensation included in cost of revenues is as follows:

	Year Ended October 31,	
	2003	2002
	<i>(in thousands)</i>	
Core/developed technology	\$72,866	\$26,192
Contract rights intangible	17,233	7,181
Other intangible assets	2,215	356
Deferred stock compensation	542	207
Total	<u>\$92,856</u>	<u>\$33,936</u>

Total cost of revenue as a percentage of total revenue for fiscal 2003 increased to 20% as compared to 19% in fiscal 2002. This increase is primarily due to an increase in amortization of contract rights intangible and core/developed technology recorded as a result of our acquisitions in fiscal 2003 and 2002, the cost of our realignment of operations totaling \$2.6 million as discussed above under *Workforce Realignment*, additional royalties of \$1.5 million and other termination benefits of \$1.2 million as discussed above under *Work Force Reduction*. Our total product costs are relatively fixed and do not fluctuate significantly with changes in revenue or changes in revenue recognition methods.

Total cost of revenue as a percentage of total revenue for fiscal 2002 remained relatively flat at 19% as compared to fiscal 2001. Cost of revenue, excluding amortization of intangible assets and deferred stock compensation, as a percentage of total revenue decreased due to the increase in quarterly amortization of deferred revenue and backlog, which is an inherent result of the use of the ratable license model until fully phased in and due to the fact that other cost of revenue components remained relatively flat. However, this decrease as a percentage of total revenue in fiscal 2002 was offset by the commencement of amortization of the contract rights intangible and core/developed technology recorded as a result of acquisitions in fiscal 2002.

Research and Development. Research and development expenses for fiscal 2003 increased 27% to \$285.9 million as compared to \$225.5 million in fiscal 2002. The increase consists primarily of (i) \$30.7 million in research and development personnel and related costs as a result of acquisitions in fiscal 2002 and 2003 and including additional employer payroll taxes incurred as a result of an increase in the number of stock option exercises during the fiscal year; (ii) \$22.2 million in increased human resources, information technology and facilities costs to research and development as a result of the increase in research and development headcount as a percentage of total headcount; (iii) \$6.3 million as a result of our realignment of operations as discussed above under *Workforce Realignment*; and (iv) \$2.3 million in consulting services. These increases are partially offset by a decrease in depreciation expense of \$2.8 million.

Research and development expenses for fiscal 2002 increased 19% to \$225.5 million as compared to \$189.8 million for fiscal 2001. The increase in expenses is due to increases of (i) \$28.7 million in compensation and compensation-related costs as a result of an increase in research and development headcount due to the Avant! merger; (ii) \$11.3 million in human resources, technology and facilities costs as a result of increased research and

development staffing; and (iii) \$4.2 million in depreciation expense. These increases were partially offset by decreases of (i) \$5.4 million in consulting expenses and (ii) \$4.3 million of other expenses including facilities, travel, communications, supplies and recruiting as a result of our cost reduction programs.

Sales and Marketing. Sales and marketing expenses for fiscal 2003 increased 17% to \$310.7 million as compared to \$264.8 million in fiscal 2002. The increase consists primarily of (i) \$42.4 million in additional sales and marketing personnel and related costs as a result of acquisitions in fiscal 2002 and 2003 and including additional employer payroll taxes incurred as a result of an increase in the number of stock option exercises during the fiscal year offset by savings from a four-day shutdown of operations in North America; (ii) \$4.8 million as a result of our realignment of operations as discussed above under *Workforce Realignment*; and (iii) \$2.7 million in additional travel expenses. These increases were partially offset by a decrease of \$3.8 million in human resources, technology and facilities costs to sales and marketing expenses as a result of a decrease in sales and marketing headcount as a percentage of total headcount.

Sales and marketing expenses for fiscal 2002 decreased 3% to \$264.8 million as compared to \$274.0 million in fiscal 2001. The overall decrease is due to decreases of (i) \$8.4 million in human resources, technology and facilities costs as a result of a decrease in sales and marketing headcount as a percentage of total headcount; (ii) \$1.3 million in employee functions; (iii) \$1.4 million in consulting expenses; and (iv) \$2.8 million in other expenses including communications and supplies, foundation contributions, professional services, subscriptions and memberships as a result of our cost reduction efforts. These decreases were partially offset by increases of (i) \$4.8 million in compensation and related costs attributable to an increase in sales and marketing headcount resulting from the Avant! merger and (ii) \$1.9 million in travel relating to customer visits to discuss the integration of Synopsys and Avant! products.

General and Administrative. General and administrative expenses for fiscal 2003 increased 15% to \$90.0 million as compared to \$78.5 million in fiscal 2002. The increase consists primarily of (i) \$12.8 million in additional general and administrative personnel and related costs as a result of acquisitions in fiscal 2002 and 2003 and including additional employer taxes incurred as a result of an increase in the number of stock option exercises during the current year; (ii) \$7.0 million in depreciation on upgrades to our information technology infrastructure; (iii) \$5.7 million in facilities costs due to new leases during the current year and the expiration of a sublease on one of Synopsys' buildings in June 2003; (iv) \$3.7 million in professional services costs, patent prosecution expenditures, Sarbanes-Oxley Act compliance and litigation; (v) \$2.8 million in maintenance agreements covering more software and computing equipment due to acquisitions in fiscal 2002 and 2003; and (vi) \$1.2 million related to the realignment of operations as discussed above under *Workforce Realignment*. These increases were offset by a decrease of (i) \$14.2 million in human resources, technology and facilities costs to general and administrative expenses as a result of a decrease in general and administrative headcount as a percentage of total headcount; and (ii) a decrease of \$6.6 million in bad debt expense as accounts receivable aging improved year over year.

General and administrative expenses for fiscal 2002 increased 13% to \$78.5 million as compared to \$69.7 million in fiscal 2001. The overall increase is due to increases of (i) \$11.1 million in facilities costs as a result of an increased number of sites due to the Avant! merger; (ii) \$7.0 million in compensation and compensation-related costs as a result of increased headcount due to the Avant! merger; (iii) \$5.6 million in professional service fees; (iv) \$2.2 million in communications costs; (v) \$1.6 million in equipment to update licenses for our internal enterprise application systems; (vi) \$1.4 million in depreciation; and (vii) \$2.9 million in other expenses including travel and property tax assessments. These increases were offset by decreases of (i) \$20.0 million as a result of decreased general and administrative headcount as a percentage of total headcount and (ii) \$3.9 million in consulting costs as a result of our cost reduction efforts.

Integration Costs. Non-recurring integration costs incurred relate to merger activities which are not included in the purchase consideration under Emerging Issues Task Force Number 95-3 (EITF 95-3), *Recognition of Liabilities in Connection with a Purchase Business Combination*. These costs are expensed as

incurred. During fiscal 2002, integration costs were \$128.5 million and consisted primarily of (i) \$95.0 million related to the premium for the insurance policy acquired in conjunction with the Avant! merger; (ii) \$14.7 million related to write-downs of Synopsys facilities and property under the management approved facility exit plan for the Avant! merger; (iii) \$10.0 million and \$0.7 million related to severance costs for Synopsys employees who were terminated and costs associated with transition employees as a result of the Avant! and inSilicon mergers, respectively; (iv) \$1.3 million related to the write-off of software licenses owned by Synopsys which were originally purchased from Avant!; (v) \$3.7 million goodwill impairment charge related to a prior Synopsys acquisition as a result of the acquisition of Avant!; and (vi) \$1.2 million and \$1.9 million of other expenses including travel and certain professional fees for the Avant! and Co-Design mergers, respectively.

In-Process Research and Development. Purchased in-process research and development (IPRD) of \$19.9 million and \$87.7 million in fiscal 2003 and 2002, respectively, represents the write-off of in-process technologies associated with our acquisitions of Numerical in fiscal 2003 and Avant! and inSilicon in fiscal 2002. There were no acquisitions during fiscal 2001. 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 dates 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. The value of in-process technology is then segmented into two classifications: (i) developed technology (completed) and (ii) 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 to be created by Synopsys after the acquisition. These value creation efforts were estimated by considering the following major factors: (i) time-based data, (ii) cost-based data and (iii) complexity-based data.

The value of the in-process technology was determined using a discounted cash flow model similar to the income approach, focusing 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 within the classification segments. Revenue estimates were based on (i) individual product revenues, (ii) anticipated growth rates, (iii) anticipated product development and introduction schedules, (iv) product sales cycles, and (v) the estimated life of a product's underlying technology. From the revenue estimates, operating expense estimates, including costs of sales, general and administrative, selling and marketing, income taxes and a use charge for contributory assets, were deducted to arrive at operating income. Revenue growth rates were estimated by management 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's underlying technology. Operating expense estimates reflect Synopsys' historical expense ratios. Additionally, these projects will require continued research and development after they have reached a state of technological and commercial feasibility. 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 (WACC), 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 levels of such technology, if any, and the uncertainty of technological advances, all of which are unknown at this time.

Numerical. On March 1, 2003, we acquired Numerical, which specialized in subwavelength lithography-enabling solutions. The IPRD expense related to the Numerical acquisition was \$18.3 million. Numerical had five IPRD projects—Phase Shift Masking (PSM), Subwavelength Software, Equipment Software, Cadabra and Computer Aided Transcription System (CATS)—representing 25%, 7%, 6%, 5% and 57%, respectively, of the total

IPRD value. These projects were expected to be completed shortly following the completion of the merger. PSM, Subwavelength Software and CATS were completed in fiscal 2003. Cadabra was released in the first quarter of fiscal 2004. The Equipment Software project consists of in-process technology for multiple products. These products were either completed in fiscal 2003, discontinued or are expected to be integrated with other Synopsys products during fiscal 2004. Expenditures to complete Numerical's IPRD approximate the original estimates.

inSilicon. On September 20, 2002, we acquired inSilicon, a leading provider of connectivity semiconductor intellectual property used by semiconductor and systems companies to design systems-on-chip that are critical components of innovative wired and wireless products. The IPRD expense related to the inSilicon acquisition was \$5.2 million. inSilicon had three IPRD projects—DELA, Peripheral Component Interconnect (PCI) Express and Universal Serial Business Physical (USB PHY)—accounting for 54%, 23% and 23% of the total IPRD value, respectively. These projects were 25%, 67% and 20% complete at the time of acquisition, respectively. During fiscal 2003, Synopsys decided to no longer pursue the DELA project. PCI Express is approximately 80% complete and USB PHY has been completed. Expenditures to complete USB PHY and expected expenditures to complete PCI Express approximate the original estimates.

Avant!. On June 6, 2002, we acquired Avant!, a leading developer of software used in the physical design and physical verification stages of IC design. The IPRD expense related to the Avant! merger was \$82.5 million. The principal in-process technologies were identified based on the following product families:

<u>Product Family</u>	<u>Value</u> <i>(in thousands)</i>	<u>Percent Complete as of Date of Acquisition</u>	
		<u>Short-Term</u>	<u>Long-Term</u>
Physical Products Division (PPD)	\$48,000	90%	60%
Verification Products Division (VPD)	\$ 7,900	90%	50%
Analysis Products Division (APD)	\$18,700	90%	76%
Logical Products Division (LPD)	\$ 1,400	90%	not applicable
Technology Computer Aided Design (TCAD)	\$ 2,200	90%	80%
Analogy	\$ 4,300	90%	75%

These projects were completed during fiscal 2002 and 2003. Expenditures to complete the acquired in-process technologies approximated the original estimates.

The risks associated with acquired research and development are considered high and no assurance can be made that these products will generate any benefit to us or meet market expectations.

Amortization of Goodwill, Intangible Assets and Deferred Stock Compensation. Amortization of intangible assets and deferred stock compensation includes the amortization of trademarks, tradenames, customer relationships and covenants not to compete and is included in operating expenses as follows:

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	<i>(in thousands)</i>		
Intangible assets	\$30,864	\$11,133	\$ —
Deferred stock compensation	4,454	1,315	—
Goodwill	—	16,201	17,012
Total	<u>\$35,318</u>	<u>\$28,649</u>	<u>\$17,012</u>

The increase in amortization of intangible assets is due primarily to fiscal 2003 and 2002 acquisitions partially offset by a decrease in goodwill amortization as a result of the adoption of SFAS 142 on November 1, 2002.

The following table presents the estimated future amortization of deferred stock compensation reported in both cost of revenue and operating expenses:

Fiscal Year	<i>(in thousands)</i>
2004	\$3,677
2005	2,403
2006	840
2007	<u>250</u>
Total estimated future amortization of deferred stock compensation	<u>\$7,170</u>

Impairment of Intangible Assets. In fiscal 2002, we recognized an aggregate impairment charge of \$3.8 million to reduce the amount of certain intangible assets associated with prior acquisitions to their estimated fair value. Approximately \$3.7 million and \$0.1 million are included in integration expense and amortization of intangible assets, respectively, on the consolidated statement of operations. The impairment charge is primarily attributable to certain technology acquired from and goodwill related to the acquisition of Stanza, Inc. (Stanza) in 1999. During fiscal 2002, we determined that we would not allocate future resources to assist in the market growth of this technology as products acquired in the merger with Avant! provided customers with superior capabilities. As a result, we do not anticipate any future sales of the Stanza product.

In fiscal 2001, we recognized an aggregate impairment charge of \$2.2 million to reduce the amount of certain intangible assets associated with prior acquisitions to their estimated fair value. Approximately \$1.8 million and \$0.4 million are included in cost of revenues and amortization of intangible assets, respectively, on the consolidated statement of operations. The impairment charge is attributable to certain technology acquired from and goodwill related to the acquisition of Eagle Design Automation, Inc. (Eagle) in 1997. During fiscal 2001, we determined that we would not allocate future resources to assist in the market growth of this technology. As a result, we do not anticipate any future sales of the Eagle product.

There were no impairment charges during fiscal 2003.

Other (Expense) Income, Net. Other income, net was \$24.1 million in fiscal 2003 and consisted primarily of (i) realized gain on investments of \$20.7 million; (ii) rental income of \$6.3 million; (iii) interest income of \$5.2 million; (iv) impairment charges related to certain assets in our venture portfolio of (\$4.5) million; (vii) foundation contributions of (\$2.1) million; and (viii) interest expense of (\$1.6) million.

Other (expense), net of other income was (\$208.6) million in fiscal 2002 and consisted primarily of (i) (\$240.8) million expense due to the settlement of the Cadence Design Systems, Inc. (Cadence) litigation; (ii) (\$11.3) million in impairment charges related to certain assets in our venture portfolio; (iii) realized gains on investments of \$22.7 million; (iv) a gain of \$3.1 million for the termination fee on the IKOS Systems, Inc. (IKOS) merger agreement; (v) rental income of \$10.0 million; (vi) interest income of \$8.3 million; and (vii) and other miscellaneous expenses including amortization of premium forwards and foreign exchange gains and losses recognized during the fiscal year of (\$0.6) million.

Other income, net was \$83.8 million in fiscal 2001 and consisted primarily of (i) a gain of \$10.6 million on the sale of our silicon libraries business to Artisan Components, Inc.; (ii) (\$5.8) million in impairment charges related to certain assets in our venture portfolio; (iii) realized gains on investments of \$55.3 million; (iv) rental income of \$8.6 million; (v) interest income of \$12.8 million; and (vi) other miscellaneous income including amortization of premium forwards and foreign exchange gains and losses recognized during the fiscal year of \$2.3 million.

Termination of Agreement to Acquire IKOS Systems, Inc. On July 2, 2001, we entered into an Agreement and Plan of Merger and Reorganization (the IKOS Merger Agreement) with IKOS Systems, Inc. The IKOS Merger Agreement provided for the acquisition of all outstanding shares of IKOS common stock by Synopsys.

On December 7, 2001, Mentor Graphics Corporation (Mentor) commenced a cash tender offer to acquire all of the outstanding shares of IKOS common stock at \$11.00 per share, subject to a number of conditions. On March 12, 2002, Synopsys and IKOS executed a termination agreement by which the parties terminated the IKOS Merger Agreement and pursuant to which IKOS paid Synopsys the \$5.5 million termination fee required by the IKOS Merger Agreement. This termination fee and \$2.4 million of expenses incurred in conjunction with the acquisition are included in other income, net on the consolidated statement of operations for the year ended October 31, 2002. Synopsys subsequently executed a revised termination agreement with Mentor and IKOS in order to add Mentor as a party thereto.

Effect of New Accounting Standards

In July 2001, the Financial Accounting Standards Board (FASB) issued Statements of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*. We adopted SFAS 142 on November 1, 2002 and ceased amortizing goodwill recorded for business combinations consummated prior to July 1, 2001. In addition, as of November 1, 2002, we assessed the useful lives and residual values of all acquired intangible assets recorded on the balance sheet and also tested goodwill for impairment per SFAS 142. In our impairment analysis, we determined we have one reporting unit. We completed the goodwill impairment review as of the beginning of fiscal 2003 and found no indicators of impairment. This impairment review was based on our fair value as determined by our market capitalization. As of October 31, 2003, unamortized goodwill was \$550.7 million, which, in accordance with SFAS 142, we will not amortize.

Liquidity and Capital Resources

Cash, cash equivalents and short-term investments increased \$283.6 million, or 68%, to \$698.4 million as of October 31, 2003 from \$414.7 million as of October 31, 2002. Our source of cash, cash equivalents and short-term investments over the last three years has been from funds generated from our business, including cash on hand from companies we have acquired.

Cash provided by operations was \$391.5 million in fiscal 2003 as compared to cash used by operations of \$181.0 million in fiscal 2002. Cash flow in fiscal 2002 reflected the payment of \$335.8 million in insurance premiums related to settlement of litigation between Avant!, which we acquired in June 2002, and Cadence, resulting in a net loss for the year. Cash provided by operations is directly related to the payment terms we grant on sales of our software and services. During fiscal 2003, we have increasingly granted extended payment terms to our customers, negatively affecting cash flow from operations. Cash flow from operations in 2003 reflected a significant cash tax benefit resulting from the net loss in fiscal 2002. During fiscal 2003 cash was provided by net income adjusted for non-cash related items, for cash flows related to hedging activities and by an increase in deferred revenue due to continued sales of TSLs. Cash used for changes in working capital balances included decreases in accounts payable, accrued liabilities and accounts receivable. Accounts payable and accrued liabilities decreased as a result of payments of merger-related accruals, commissions and year-end bonuses, partially offset by current year accruals. Accounts receivable decreased due to the timing of installment billings to customers on long-term arrangements.

Cash used in investing activities was \$258.3 million in fiscal 2003 as compared to cash provided by investing activities of \$275.7 million in fiscal 2002. During fiscal 2003, the following occurred: (i) cash paid for acquisitions totaled \$167.7 million; (ii) net purchases of short- and long-term investments totaled \$37.8 million; and (iii) capital expenditures totaled \$50.1 million. In fiscal 2002, the following occurred: (i) cash received from acquisitions totaled \$168.3 million; (ii) proceeds from net sales of investments totaled \$157.8 million; and (iii) capital expenditures totaled \$48.8 million.

Cash provided by financing activities was \$74.2 million in fiscal 2003 as compared to cash used in financing activities of \$51.8 million in fiscal 2002. The increase of \$126.0 million in cash provided by financing activities is primarily due to an increase in proceeds of \$215.1 million from the sale of shares pursuant to our

employee stock option plans during fiscal 2003 offset by an increase in the purchase of treasury stock. During fiscal 2003, Synopsys repurchased treasury stock of \$260.7 million as compared to \$171.7 million in fiscal 2002.

Accounts receivable, net of allowances, decreased \$6.2 million, or 3%, to \$201.0 million as of October 31, 2003 from \$207.2 million as of October 31, 2002. Days sales outstanding, calculated based on revenues for the most recent quarter and accounts receivable at the balance sheet date, decreased to 58 days as of October 31, 2003 from 61 days as of October 31, 2002. The decrease in days sales outstanding is due in part to the timing of large cash collections realized during the fourth quarter of fiscal 2003.

On November 22, 2002 and December 16, 2002, we made payments to Cadence totaling \$20.0 million and \$245.0 million, respectively, under the terms of the settlement agreement relating to litigation between Cadence and Avant!. See Note 3 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data*.

On March 1, 2003, we completed our acquisition of Numerical Technologies, Inc. We paid Numerical common stock holders \$7.00 in cash in exchange for each share of Numerical common stock owned as of the merger date, or approximately \$240.2 million in total and \$161.3 million net of cash held by Numerical at the merger date. We paid for Numerical common stock out of our cash, cash equivalents and short-term investments.

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

Stock Option Plans

Under our 1992 Stock Option Plan (the 1992 Plan), 38,951,016 shares of common stock have been authorized for issuance. Pursuant to the 1992 Plan, the Board of Directors (the Board) may grant either incentive or non-qualified stock options to purchase shares of common stock to eligible individuals at not less than 100% of the fair market value of those shares on the grant date. Stock options granted under the 1992 Plan generally vest over a period of four years and expire ten years from the date of grant. As of October 31, 2003, 9,003,784 stock options remain outstanding and 7,479,776 shares of common stock are reserved for future grants under this plan.

Under our 1998 Non-Statutory Stock Option Plan (the 1998 Plan), 53,247,068 shares of common stock have been authorized for issuance. Pursuant to the 1998 Plan, the Board may grant non-qualified stock options to employees, excluding executive officers. Exercisability, option price and other terms are determined by the Board but the option price shall not be less than 100% of the fair market value of those shares on the grant date. Stock options granted under the 1998 Plan generally vest over a period of four years and expire ten years from the date of grant. As of October 31, 2003, 28,161,720 stock options remain outstanding and 8,179,958 shares of common stock were reserved for future grants under this plan.

Under our 1994 Non-Employee Directors Stock Option Plan (the Directors Plan), 1,800,000 shares have been authorized for issuance. The Directors Plan provides for automatic grants to each non-employee member of the Board upon initial appointment or election to the Board, upon reelection and for annual service on Board committees. The option price shall not be less than 100% of the fair market value of those shares on the grant date. Under the Directors Plan, as originally adopted, new directors receive an option for 40,000 shares, vesting in equal installments over four years. In addition, each continuing director who is elected at an annual meeting of stockholders receives an option for 20,000 shares and an additional option for 10,000 shares for each Board committee membership, up to a maximum of two committee service grants per year. In August 2003, the Board amended the Directors Plan in order to reduce the size of the initial and committee grants to 30,000 and 5,000 shares, respectively. The annual and committee service option grants vest in full on the date immediately prior to the date of the annual meeting following their grant. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants are prorated based upon the amount of time since the last annual meeting. As of October 31, 2003, 1,168,492 stock options remain outstanding and 110,346 shares of common stock were reserved for future grants under this plan.

We have assumed certain option plans in connection with business combinations. Generally, the options granted under these plans have terms similar to our own options. The exercise prices of such options have been adjusted to reflect the relative exchange ratios. We do not intend to make future grants out of these option plans.

We monitor dilution related to our option program by comparing net option grants in a given fiscal period to the number of shares outstanding. The dilution percentage is calculated as the new option grants for the fiscal period, net of options forfeited by employees leaving Synopsys, divided by the total outstanding shares at the end of such fiscal period. The option dilution percentages were 0.9% and 3.4% for fiscal 2003 and 2002, respectively.

A summary of the distribution and dilutive effect of options granted is as follows:

	<u>Year Ended</u> <u>October 31,</u>	
	<u>2003</u>	<u>2002</u>
Total grants, net of returns and cancellations, during the period as percentage of outstanding shares exclusive of options assumed in acquisitions	0.9% ⁽¹⁾	3.4%
Grants to named executive officers, as defined below, during the period as a percentage of total options granted	8.4%	9.3%
Grants to named executive officers during the period as a percentage of outstanding shares	0.2%	0.5%
Total outstanding options held by named executive officers as a percentage of total options outstanding	16.7%	13.7%

(1) Total grants, net of returns and cancellations, include the cancellation of approximately 812,000 options from a former named executive officer. If these options had been excluded from the calculation, the net grants for fiscal 2003 as a percentage of outstanding shares would have been 1.4%.

A summary of our option activity and related weighted-average exercise prices for fiscal 2003 is as follows:

	<u>Shares</u> <u>Available for</u> <u>Options</u>	<u>Options Outstanding</u>	
		<u>Number</u> <u>of Shares</u>	<u>Weighted-</u> <u>Average</u> <u>Exercise</u> <u>Price</u>
	<i>(in thousands, except per share amounts)</i>		
Balance at October 31, 2002	16,826	55,960	\$20.70
Grants	(4,518)	4,518	\$25.06
Options assumed in acquisitions	—	2,115	\$24.74
Exercises	—	(16,573)	\$18.60
Cancellations	3,162	(3,901)	\$24.02
Additional shares reserved	300	—	—
Balance at October 31, 2003	<u>15,770</u>	<u>42,119</u>	\$21.89

As of October 31, 2003, a total of approximately 39.0 million, 53.2 million and 1.8 million shares were reserved for issuance under our 1992, 1998 and Directors Plans, respectively, of which 15.8 million shares were available for future grants. For additional information regarding our stock option activity during fiscal 2002, please see Note 7 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data*.

A summary of outstanding in-the-money and out-of-the-money options and related weighted-average exercise prices as of October 31, 2003 is as follows:

	Exercisable		Unexercisable		Total	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
	<i>(in thousands, except per share amounts)</i>					
In-the-Money	25,467	\$21.31	15,714	\$21.84	41,181	\$21.51
Out-of-the-Money ⁽¹⁾	457	\$40.72	481	\$36.05	938	\$38.33
Total Options Outstanding	<u>25,924</u>	<u>\$21.65</u>	<u>16,195</u>	<u>\$22.27</u>	<u>42,119</u>	<u>\$21.89</u>

(1) Out-of-the-money options are those options with an exercise price equal to or above the closing price of \$31.72 on October 31, 2003, the last trading day of fiscal 2003.

The following table sets forth further information regarding individual grants of options during fiscal 2003 for the Chief Executive Officer and each of the other four most highly compensated executive officers (named executive officers) serving as such on October 31, 2003 whose compensation for fiscal 2003 exceeded \$100,000.

Name	Individual Grants			Expiration Date	Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term (\$)	
	Number of Securities Underlying Options Granted ⁽¹⁾	Percent of Total Options Granted to Employees ⁽²⁾	Exercise Price (\$/Share)		5%	10%
Aart J. de Geus	60,000	1.43%	\$21.73	12/9/12	\$819,764	\$2,077,443
	16,500	0.39%	\$20.46	2/25/13	\$212,309	\$ 538,032
	16,600	0.39%	\$29.28	5/27/13	\$305,673	\$ 774,635
	11,500	0.27%	\$33.30	8/26/13	\$240,799	\$ 610,232
Chi-Foon Chan	60,000	1.43%	\$21.73	12/9/12	\$819,764	\$2,077,443
	15,150	0.36%	\$20.46	2/25/13	\$194,938	\$ 494,011
	15,200	0.36%	\$29.28	5/27/13	\$279,893	\$ 709,305
	10,500	0.25%	\$33.30	8/26/13	\$219,860	\$ 557,168
Vicki L. Andrews	27,200	0.65%	\$21.73	12/9/12	\$371,626	\$ 941,774
	10,950	0.26%	\$20.46	2/25/13	\$140,896	\$ 357,057
	13,000	0.31%	\$29.28	5/27/13	\$239,382	\$ 606,642
	10,000	0.24%	\$33.30	8/26/13	\$209,390	\$ 530,637
John Chilton	13,800	0.33%	\$21.73	12/9/12	\$188,546	\$ 477,812
	7,200	0.17%	\$20.46	2/25/13	\$ 92,644	\$ 234,777
	5,800	0.14%	\$29.28	5/27/13	\$106,801	\$ 270,656
	8,000	0.19%	\$33.30	8/26/13	\$167,512	\$ 424,509
Antun Domic	22,700	0.54%	\$21.73	12/9/12	\$310,144	\$ 785,966
	8,850	0.21%	\$20.46	2/25/13	\$113,875	\$ 288,581
	7,800	0.19%	\$29.28	5/27/13	\$143,630	\$ 363,985
	9,000	0.22%	\$33.30	8/26/13	\$188,451	\$ 477,573

(1) Sum of all option grants made during fiscal 2003 to such person. Options become exercisable ratably in a series of monthly installments over a four-year period from the grant date, assuming continued service to Synopsys, subject to acceleration under certain circumstances involving a change in control of Synopsys. Each option has a maximum term of ten years, subject to earlier termination upon the optionee's cessation of service.

(2) Based on a total of 4.2 million shares subject to options granted to employees under Synopsys' option plans during fiscal 2003.

The following table provides the specified information concerning exercises of options to purchase our common stock and the value of unexercised options held by our named executive officers as of October 31, 2003:

Name	Shares Acquired On Exercise	Value Realized ⁽¹⁾	Number of Securities Underlying Unexercised Options at October 31, 2003		Value of In-the-Money Options at October 31, 2003 ⁽²⁾	
			Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable
Aart J. de Geus	—	—	3,071,648	490,352	\$34,652,561	\$4,728,735
Chi-Foon Chan	200,000	2,734,000	1,855,278	421,372	\$17,989,193	\$3,998,101
Vicki L. Andrews	114,332	1,417,088	235,097	244,853	\$ 1,521,659	\$1,920,072
John Chilton	198,226	2,695,140	177,828	146,232	\$ 1,084,343	\$1,062,785
Antun Domic	167,000	1,939,111	197,235	173,815	\$ 1,187,687	\$1,350,641

(1) Market value at exercise less exercise price.

(2) Market value of underlying securities as of October 31, 2003 (\$31.72) minus the exercise price.

The following table provides information regarding equity compensation plans approved and not approved by security holders as of October 31, 2003:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants, and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
<i>(in thousands, except price per share amounts)</i>			
Employee Equity Compensation Plans Approved by Stockholders ⁽¹⁾	10,172	\$21.43	15,424 ⁽⁴⁾
Employee Equity Compensation Plans Not Approved by Stockholders ⁽²⁾	28,162	\$22.27	8,180
Total	38,334 ⁽³⁾	\$22.04	23,604 ⁽⁵⁾

(1) Synopsys' stockholder approved equity compensation plans include the 1992 Plan, the Directors Plan and the Employee Stock Purchase Plans.

(2) Synopsys' only non-stockholder approved equity compensation plan is the 1998 Plan.

(3) Does not include information for options assumed in connection with acquisitions. As of October 31, 2003, a total of 3.8 million shares of our common stock were issuable upon exercise of such outstanding options.

(4) Includes 3.6 million shares approved by stockholders on June 20, 2003, for addition to the Employee Stock Purchase Plans.

(5) Comprised of (i) 7.5 million shares remaining available for issuance under the 1992 Plan, (ii) 8.2 million shares remaining available for issuance under the 1998 Plan, (iii) 0.1 million shares remaining available for issuance under the Directors Plan, and (iv) 7.8 million shares remaining available for issuance under the Employee Stock Purchase Plans as of October 31, 2003.

Pre-approvals of Non-Audit Services by Audit Committee

Pursuant to Section 10A(i)(3) of the Exchange Act, during the fourth quarter of fiscal 2003, the Audit Committee pre-approved the following non-audit services to be performed by KPMG LLP, our independent auditors:

1. Consultation relating to merger or liquidation of certain Synopsys foreign subsidiaries; and
2. International tax planning and tax compliance services relating to certain foreign subsidiaries.

Factors That May Affect Future Results

Weakness or budgetary caution in the semiconductor and electronics industries would negatively impact our business.

The semiconductor and electronics industries experienced steep declines in orders and revenue in 2001 and 2002, before recovering moderately in 2003. Further recovery is subject to significant risks, and these manufacturers have been cautious to adopt an improved outlook on demand for their products. Accordingly, they may continue to constrain their EDA investments, and we cannot predict whether, or when, further recovery will translate into increased EDA investments. Should our customers and prospective customers remain cautious in their EDA purchases due to market conditions or other factors, our business, operating results and financial condition would be materially and adversely affected.

The EDA industry is highly competitive, and competition may have a material adverse affect on our business and operating results.

We compete with other EDA vendors that offer a broad range of products and services, such as Cadence Design Systems and Mentor Graphics Corporation, and with EDA vendors that offer products focused on one or more discrete phases of the IC design process. 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, post-sale support, interoperability with our own and other vendors' products, price and payment terms. Additional competitive challenges include:

- 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, competing technologies may reduce demand for our products and services or render them obsolete.
- Our Galaxy Design Platform does not yet fully integrate the suite of Synopsys' logic and physical design implementation products. The competitive offerings of Cadence and Magma Design Automation are in some respects more integrated than our Galaxy Design Platform. To compete, we must further integrate our products in the Galaxy Design Platform, while at the same time continuing to improve the performance and functionality of our individual products. This effort will continue to require significant engineering and development work. We can provide no assurances that we will be able to offer a competitive complete design flow to customers or that customers will accept and adopt our platform.
- Our new initiatives, such as the Galaxy Design and Discovery Verification Platforms and expanded IP and design-for-manufacturing products, face intense competition, and some cases address emerging markets. Accordingly, it is difficult for us to predict the success of these products. In the past, we have introduced new products that failed to meet our revenue expectations. If we fail to expand revenue from our new initiatives at the desired rate, our business, operating results and financial condition would be materially and adversely affected.
- Price and payment terms have become increasingly important competitive factors. We are regularly agreeing to extended payment terms on our time-based licenses, negatively affecting cash flow from operations.
- Due to discounting by our competitors and other competitive factors, in certain situations we are aggressively discounting our products. As a result, average prices for our products may decline. In the alternative, we may lose potential business where we believe that discounting is not in our interests. In either case, our business, operating results and financial condition could be materially and adversely affected.

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, making it difficult to predict revenue and earnings for any given fiscal period, including customer demand, license terms, and the timing of revenue recognition on products and services sold. 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.

The following are some of the specific factors that could affect our revenue and earnings in a particular quarter or over several fiscal periods:

- We license our products through a variety of license types. In upfront licenses we recognize revenue at the time of product shipment. In time-based licenses we recognize revenue over time. Our revenue and earnings expectations over a number of fiscal periods assume a mix between upfront and time-based licenses. Changes in this mix due to customer demand, application of accounting rules regarding revenue recognition, competitive pressures or other reasons could have a material adverse affect on our revenues and earnings. For example, a larger proportion of upfront licenses may increase revenue and earnings in a particular quarter, but not contribute revenues and earnings in future fiscal periods. Conversely, a lower proportion of upfront license orders than we expect could have a material adverse affect on revenue and earnings for a particular quarter.
- We frequently receive a significant proportion of our orders for a given quarter in the last one or two weeks of the quarter. The delay of a single order, especially a large order, could have a material adverse affect on our revenues and earnings.
- 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 approval or project starts because of budgetary constraints or their budget cycles.
- Our business is seasonal. Historically, our orders and revenue have been lowest in our first fiscal quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year.
- We base our operating expenses in part on our expectations of future revenue and generally must commit to expense levels in advance of revenue. Since only a small portion of our expenses varies with revenue, any revenue shortfall causes a direct reduction in net income.

The decline in starts of new IC designs, industry consolidation and other potentially long-term trends may have an adverse affect on the EDA industry, including demand for our products and services.

Technology innovations, such as system-on-a-chip designs and IC designs with features of 130 nanometers and below, have substantially increased the complexity, cost and risk of designing and manufacturing ICs. These trends require semiconductor manufactures to purchase increasingly sophisticated EDA software and pre-designed and pre-verified IP components, creating market opportunity for us. At the same time, they contribute, along with the downturn in the semiconductor industry in 2001 and 2002, to the following potentially long-term trends:

- The number of starts of new IC designs has declined. New IC design starts are a key driver in the demand for EDA software.
- Fewer new companies engaged in semiconductor design are being formed or funded. These companies are traditionally an important source of new business for us.

- A number of partnerships and mergers in the semiconductor and electronics industries have occurred, and more are likely. Partnerships and mergers can reduce the aggregate level of purchases of EDA software, including our products and services, by the companies involved.

These trends, if sustained, could have an adverse effect on the EDA industry, including the demand for our products and services.

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 in recent years, and as part of our efforts to expand our product and services offerings, we may acquire additional companies. During fiscal 2002, we acquired Avant!, inSilicon and Co-Design. During fiscal 2003, we acquired Numerical, InnoLogic Systems, Inc., and the verification IP assets of Qualis, Inc. Bidding for future acquisitions may be intense, which may make it difficult for us to acquire additional companies at acceptable prices, if at all.

In addition to direct costs, acquisitions pose a number of risks, including:

- Potential dilution of our earnings per share;
- Problems in integrating the acquired products into our business;
- Difficulties in retaining key employees and integrating those employees into our company;
- Challenges in ensuring acquired products and the development practices of employees of acquired companies meet our quality standards;
- Failure to realize expected synergies or cost savings;
- Failure of acquired products to achieve projected sales;
- Drain on management time for acquisition-related activities;
- Adverse effects on customer buying patterns or relationships; and
- Assumption of unknown liabilities.

While we review proposed acquisitions carefully and strive to negotiate terms that are favorable to us, we can provide no assurances that any acquisition will have a positive effect on our 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 associated with such product or technology; these writedowns, if significant, could have a material adverse effect on our results of operations.

Stagnation of foreign economies, foreign exchange rate fluctuations or other international issues could adversely affect our performance.

During fiscal 2003, we derived 43% of our revenue from outside North America, as compared to 35% during fiscal 2002. Foreign sales are vulnerable to regional or worldwide economic, political and health conditions, including the effects of international political conflict and hostilities and the outbreak of diseases such as SARS. In particular, continued weakness in the telecommunications equipment business would adversely impact many of our largest European-based customers and which would cause them to curtail their EDA investments. While our sales in Japan were relatively strong during fiscal 2003, the Japanese economy remains generally weak and future growth is thus difficult to predict. Furthermore, achievement of our overall orders and revenue plans assume sales growth in the Asia Pacific region, which may not occur if growth in the rest of the world's economies does not accelerate.

Our operating results are subject to fluctuations in foreign currency exchange rates. Our revenues and operating results are adversely affected when the U.S. dollar weakens relative to other currencies, particularly the

Euro, and to a lesser extent, the Japanese yen. If the U.S. dollar should continue to weaken in fiscal 2004 relative to other currencies, particularly the Euro, our revenues and operating results will be adversely affected. Exchange rates are subject to significant and rapid fluctuations, and therefore we cannot predict the prospective impact of exchange rate fluctuations on our business, operating results and financial condition.

A failure to recruit and retain key employees would have a material adverse effect on our ability to compete.

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. Companies in the EDA industry and in the general electronics industry value experience at Synopsys. Accordingly, our employees, including employees who have joined Synopsys in connection with acquisitions, are often recruited aggressively by our competitors, and to a lesser extent, our customers. In the past, we have had high employee turnover, which may recur in the future. Our failure to recruit and retain key technical, sales and managerial personnel could have a material adverse effect on our business, financial condition and results of operations.

We issue stock options as a key component of our overall compensation. Recently enacted regulations of the Nasdaq National Market regarding stockholder approval of equity compensation plans could make it more difficult for us to grant stock options to employees in the future. In addition, the FASB and other regulatory bodies have proposed changes to generally accepted accounting principles (GAAP) that may require us to adopt a different method of determining the compensation expense for our employee stock options. Because of these enacted and proposed changes, it is possible that we may in the future incur increased cash compensation costs as a substitute for reduced stock option grants, may lose top employees to non-public, start-up companies or may generally find it more difficult to attract, retain and motivate employees, any one of which could materially and adversely affect our business.

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. Errors or delays in releasing new products or new versions of products could cause us to lose revenues or market share, increase our service costs, subject us to liability for damages and divert our resources from other tasks, any one of which could adversely affect our business and operating results.

Failing to protect our proprietary technology would have a material adverse effect on our financial condition and results of operations.

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 assurances 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. 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 could be materially and adversely affected.

We have a policy of aggressively pursuing action against companies or individuals that wrongfully appropriate or use our products and technologies. However, there can be no assurance that these actions will be successful.

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, 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 a patent held by a Japanese electronics company. We believe this claim is without merit and will continue to vigorously pursue this defense.

These types of claims can 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.

We are subject to changes in financial accounting standards, which may affect our reported financial results or the way we conduct business.

Accounting policies affecting software revenue recognition have been the subject of frequent interpretations, significantly effecting the way we license our products. As a result of the enactment of the Sarbanes-Oxley Act and the review of accounting policies by the SEC and national and international accounting standards bodies, the frequency of accounting policy changes may accelerate. Future changes in financial accounting standards, including pronouncements relating to revenue recognition, may have a significant effect on our reported results, including reporting of transactions completed before the effective date of the changes.

The FASB and various federal legislative proposals have proposed changes to GAAP that may require us to adopt a different method of determining the compensation expense for our employee stock options. Synopsys currently uses the intrinsic value method to measure compensation expense for stock-based awards to our employees. Under this standard, we generally do not consider stock option grants issued under our employee stock option plans to be compensation when the exercise price of the stock option is equal to the fair market value on the date of grant. If any change to GAAP is adopted that requires us to adopt a different method of determining the compensation expense for our employee stock options, our reported results of operations may be adversely affected.

An unfavorable government review of our tax returns or changes in our effective tax rates could adversely affect our operating results.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions. 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. In addition, we are undergoing an audit of our federal income taxes for fiscal 2001. 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 or litigation, there could be a material effect on our income tax provision and net income in the period or periods for which that determination is made.

Computer viruses, intrusion attempts on our information technology infrastructure and denial of service attacks could seriously disrupt our business operations.

Recently, "hackers" and others have created a number of computer viruses or otherwise initiated "denial of service" attacks on computer networks and systems. Our information technology infrastructure is regularly subject to various attacks and intrusion efforts of differing seriousness and sophistication. While we diligently maintain our information technology infrastructure and continuously implement protections against such viruses

or intrusions, if our defensive measures fail or should similar defensive measures by our customers fail, our business could be materially and adversely affected.

We have adopted anti-takeover provisions, which may delay or prevent changes in control of management.

We have a number of provisions that could have anti-takeover effects. In 1997, our Board of Directors adopted a Preferred Shares Rights Plan, commonly referred to as a “poison pill.” In addition, our Board of Directors has the authority, without further action by our stockholders, to issue additional shares of common stock, to fix the rights and preferences of authorized but undesignated shares of preferred stock, and to issue shares of such preferred stock. These and other provisions of Synopsys’ Restated Certificate of Incorporation and Bylaws and the Delaware General Corporation Law may deter hostile takeovers or delay or prevent changes in control of Synopsys management, including transactions in which Synopsys’ stockholders might otherwise receive a premium for their shares over then current market prices.

If export controls affecting our products are expanded, our business will be adversely affected.

The U.S. Department of Commerce regulates the sale and shipment of certain technologies by U.S. companies to foreign countries. To date, we believe we have successfully complied with applicable export regulations. However, if the U.S. Department of Commerce places significant export controls on our existing, future or acquired products, our business would be materially and adversely affected.

Terrorist acts and acts of war may seriously harm our financial condition and results of operations.

Terrorist acts or acts of war (wherever located around the world) may damage or disrupt Synopsys, our employees, facilities, partners, suppliers, or customers or cause unpredictable swings in foreign currency exchange rates, all of which could significantly impact our results of operations and expenses and financial condition. The potential for future terrorist attacks, the national and international responses to terrorist attacks or perceived threats to national security, and other acts of war or hostility have created many economic and political uncertainties that could adversely affect our business and results of operations in ways we cannot presently predict. We are predominantly uninsured for losses and interruptions caused by acts of war.

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. The carrying value approximates fair value as of October 31, 2003. In accordance with our investment policy, the weighted-average maturities of our total invested funds do not exceed one year.

	<u>Carrying Amount</u>	<u>Weighted- Average After Tax Return</u>
	<i>(in thousands)</i>	
Short-term investments—fixed rate (U.S.)	\$174,049	1.69%
Money market funds—variable rate (U.S.)	305,926	0.79%
Cash deposits and money market funds—variable rate (International)	<u>147,178</u>	0.94%
Total interest bearing instruments	<u>\$627,153</u>	1.08%

As of October 31, 2003, the stated maturities of our current investments are \$36.6 million within one year, \$84.0 million within one to five years, \$13.8 million within five to ten years and \$39.6 million after ten years. These investments are generally classified as available-for-sale and 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. Realized gains and losses on sales of short-term investments have not been material.

Our strategic investment portfolio consists of minority equity investments in publicly traded companies and investments in privately held companies. 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 other comprehensive income in stockholders' equity. The cost basis of securities sold is based on the specific identification method. These securities of privately held companies are reported at the lower of cost or fair value.

See Note 5 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data* for additional information on investment maturity dates, long-term debt and equity price risk related to our long-term investments and carrying value and write-downs of our strategic investments.

Foreign Currency Risk. The functional currency of each of Synopsys' foreign subsidiaries is the foreign subsidiary's local currency, except for our principal Irish subsidiary whose functional currency is the U.S. dollar. At the present time, we hedge only (i) those currency exposures associated with certain assets and liabilities denominated in non-functional currencies, and (ii) forecasted accounts receivable, backlog and accounts payable denominated in non-functional currencies. Our hedging activities are intended to offset the impact of currency fluctuations on the value of these balances. The success of these activities depends upon the accuracy of our estimates of balances denominated in various currencies. We do not attempt to hedge operating expenses denominated in any foreign currency. Looking forward, to the extent our estimates of various balances denominated in non-functional currencies prove inaccurate, then we will not be completely hedged, and we will record a gain or loss, depending upon the nature and extent of such inaccuracy. We can provide no assurances that our hedging transactions will be effective.

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.

Effective May 4, 2003, we changed the functional reporting currency of our principal Irish subsidiary from the Euro to the U.S. dollar because an increasing percentage of that subsidiary's sales in Europe and Asia, and the resulting accounts receivable, are denominated in U.S. dollars. The expenses of our Irish subsidiary, which manages all of our European offices, are predominantly in Euros. The accounts receivable and the expenses of our Japanese subsidiary are denominated in yen.

The following table provides information about our foreign currency contracts as of October 31, 2003. Due to the short-term nature of these contracts, the contract rates approximate the weighted-average currency exchange rates as of October 31, 2003. These forward contracts mature in approximately thirty days, and contracts are rolled forward on a monthly basis to match firmly committed transactions.

	<u>USD Amount</u> <i>(in thousands)</i>	<u>Contract Rate</u>
Forward Net Contract Values:		
Japanese yen	\$102,678	109.2300
Euro	9,062	0.8569
Canadian dollar	7,084	1.3157
British pound sterling	5,531	0.5916
Israeli shekel	1,986	4.5011
Korean won	2,419	1190.0000
Singapore dollar	936	1.7458
Taiwan dollar	3,784	33.9600
Hong Kong dollar	5,281	7.7517
Chinese renminbi	4,343	8.2729
	<u>\$143,104</u>	

Net unrealized gains of approximately \$19.3 million and \$10.0 million, net of tax on the outstanding forward contracts, as of October 31, 2003 and 2002, respectively, are included in accumulated other comprehensive income on the consolidated balance sheet. Net unrealized losses, net of tax on the outstanding forward contracts, as of October 31, 2001 were not material. Net cash inflows on maturing forward contracts during fiscal 2003 were \$37.7 million.

Item 8. Financial Statements and Supplementary Data

REPORT OF KPMG LLP, INDEPENDENT AUDITORS

The Board of Directors and
Shareholders of Synopsys, Inc.:

We have audited the accompanying consolidated balance sheets of Synopsys, Inc. and subsidiaries (the Company) as of October 31, 2003 and 2002, 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, 2003. 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 auditing standards generally accepted in the United States of America. 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, 2003 and 2002, and the results of their operations and their cash flows for each of the years in the three-year period ended October 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

As discussed in note 2 to the consolidated financial statements, effective November 1, 2002, the Company adopted Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*.

/s/ KPMG LLP

Mountain View, California
November 24, 2003

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

	October 31,	
	2003	2002
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 524,308	\$ 312,580
Short-term investments	174,049	102,153
Total cash, cash equivalents and short-term investments	698,357	414,733
Accounts receivable, net of allowances of \$8,295 and \$11,565, respectively	200,998	207,206
Deferred income taxes	248,425	282,867
Income taxes receivable	72,124	2,038
Prepaid expenses and other current assets	19,302	22,471
Total current assets	1,239,206	929,315
Property and equipment, net	184,313	185,040
Long-term investments	8,595	39,386
Goodwill, net	550,732	434,554
Intangible assets, net	285,583	355,334
Other assets	38,924	35,085
Total assets	<u>\$2,307,353</u>	<u>\$1,978,714</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 204,226	\$ 248,212
Accrued income taxes	201,855	169,912
Deferred revenue	398,878	359,245
Total current liabilities	804,959	777,369
Deferred compensation and other liabilities	47,390	36,387
Long-term deferred revenue	21,594	51,477
Stockholders' equity:		
Common stock, \$0.01 par value; 400,000 shares authorized; 155,837 and 147,124 shares outstanding, respectively	1,560	1,470
Additional paid-in capital	1,198,421	1,038,651
Retained earnings	251,979	198,863
Treasury stock, at cost; 662 and 5,482 shares, respectively	(20,733)	(116,499)
Deferred stock compensation	(7,170)	(8,858)
Accumulated other comprehensive income (loss)	9,353	(146)
Total stockholders' equity	1,433,410	1,113,481
Total liabilities and stockholders' equity	<u>\$2,307,353</u>	<u>\$1,978,714</u>

See accompanying notes to consolidated financial statements.

SYNOPSYS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year Ended October 31,		
	2003	2002	2001
Revenue:			
Upfront license	\$ 298,280	\$ 245,193	\$163,924
Service	260,679	287,747	341,833
Time-based license	618,024	373,594	174,593
Total revenue	<u>1,176,983</u>	906,534	680,350
Cost of revenue:			
Upfront license	15,950	15,319	20,479
Service	77,996	78,167	79,747
Time-based license	53,515	45,737	29,896
Amortization of intangible assets and deferred stock compensation ...	92,856	33,936	—
Total cost of revenue	<u>240,317</u>	173,159	130,122
Gross margin	<u>936,666</u>	733,375	550,228
Operating expenses:			
Research and development	285,880	225,545	189,831
Sales and marketing	310,692	264,809	273,954
General and administrative	90,021	78,461	69,682
Integration	—	128,528	—
In-process research and development	19,850	87,700	—
Amortization of goodwill, intangible assets and deferred stock compensation	35,318	28,649	17,012
Total operating expenses	<u>741,761</u>	813,692	550,479
Operating income (loss)	<u>194,905</u>	(80,317)	(251)
Other income (expense), net	<u>24,084</u>	(208,623)	83,784
Income (loss) before provision (benefit) for income taxes	<u>218,989</u>	(288,940)	83,533
Provision (benefit) for income taxes	<u>69,265</u>	(88,947)	26,731
Net income (loss)	<u>\$ 149,724</u>	<u>\$(199,993)</u>	<u>\$ 56,802</u>
Basic earnings (loss) per share:			
Net income (loss) per share	\$ 0.99	\$ (1.50)	\$ 0.47
Weighted-average common shares	<u>151,251</u>	<u>133,616</u>	<u>121,202</u>
Diluted earnings (loss) per share:			
Net income (loss) per share	\$ 0.95	\$ (1.50)	\$ 0.44
Weighted-average common shares and dilutive stock options outstanding	<u>158,326</u>	<u>133,616</u>	<u>129,318</u>

See accompanying notes to consolidated financial statements.

SYNOPSYS, INC.

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
AND COMPREHENSIVE INCOME (LOSS)
(in thousands)**

	<u>Common Stock</u>		<u>Additional Paid-In Capital</u>	<u>Retained Earnings</u>	<u>Treasury Stock</u>	<u>Deferred Compensation</u>	<u>Comprehensive Income (Loss)</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Total</u>
	<u>Shares</u>	<u>Amount</u>							
Balance at October 31, 2000	125,754	\$1,258	\$ 558,087	\$ 405,419	\$(329,493)	—		\$ 47,558	\$ 682,829
Components of comprehensive income:									
Net income	—	—	—	56,802	—	—	\$ 56,802	—	56,802
Unrealized loss on investments, net of tax of \$2,644	—	—	—	—	—	—	(4,063)	—	—
Reclassification adjustment on unrealized gains on investments, net of tax of \$21,647	—	—	—	—	—	—	(33,713)	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	(5,669)	—	—
Accumulated other comprehensive loss							<u>(43,445)</u>	(43,445)	(43,445)
Total comprehensive income							<u>\$ 13,357</u>		
Acquisition of treasury stock	(13,234)	(132)	132	—	(331,882)	—		—	(331,882)
Stock issued under stock option and stock purchase plans	6,336	64	596	(25,559)	130,258	—		—	105,359
Tax benefits associated with exercise of stock options	—	—	15,993	—	—	—		—	15,993
Balance at October 31, 2001	118,856	\$1,190	\$ 574,808	\$ 436,662	\$(531,117)	\$ —		\$ 4,113	\$ 485,656
Components of comprehensive income:									
Net loss	—	—	—	(199,993)	—	—	\$(199,993)	—	(199,993)
Unrealized gain on investments, net of tax of \$5,045	—	—	—	—	—	—	7,753	—	—
Unrealized gain on currency contracts, net of tax of \$4,218	—	—	—	—	—	—	6,482	—	—
Reclassification adjustment on unrealized gains on investments, net of tax of \$3,095	—	—	—	—	—	—	(13,738)	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	(4,756)	—	—
Accumulated other comprehensive loss							<u>(4,259)</u>	(4,259)	(4,259)
Total comprehensive loss							<u>\$(204,252)</u>		
Acquisition of Avant! Corporation	29,060	290	434,921	—	431,312	(8,102)		—	858,421
Amortization of deferred stock compensation related to acquisitions	—	—	(83)	—	—	1,605		—	1,522
Acquisition of treasury stock	(7,768)	(78)	78	—	(171,678)	—		—	(171,678)
Stock options assumed in connection with acquisition of inSilicon and Co-Design	—	—	5,929	—	—	(2,361)		—	3,568
Stock issued under stock option and stock purchase plans	6,976	68	3,538	(37,806)	154,984	—		—	120,784
Tax benefits associated with exercise of stock options	—	—	19,460	—	—	—		—	19,460
Balance at October 31, 2002	147,124	\$1,470	\$1,038,651	\$ 198,863	\$(116,499)	\$(8,858)		\$ (146)	\$1,113,481

SYNOPSYS, INC.

**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
AND COMPREHENSIVE INCOME (LOSS) - continued
(in thousands)**

	<u>Common Stock</u>		<u>Additional</u>	<u>Retained</u>	<u>Treasury</u>	<u>Deferred</u>	<u>Comprehensive</u>	<u>Accumulated</u>	<u>Total</u>
	<u>Shares</u>	<u>Amount</u>	<u>Paid-In</u>	<u>Earnings</u>	<u>Stock</u>	<u>Compensation</u>	<u>Income (Loss)</u>	<u>Other</u>	
			<u>Capital</u>					<u>Comprehensive</u>	
								<u>Income (Loss)</u>	
Balance Forward:									
Balance at October 31, 2002	147,124	\$1,470	\$1,038,651	\$198,863	\$(116,499)	\$(8,858)		\$ (146)	\$1,113,481
Components of comprehensive income:									
Net income	—	—	—	149,724	—	—	\$149,724	—	149,724
Unrealized gain on investments, net of tax of \$2,370 ...	—	—	—	—	—	—	3,663	—	—
Unrealized gain on currency contracts, net of tax of									
\$12,426	—	—	—	—	—	—	19,204	—	—
Reclassification adjustment on unrealized gains on									
investments, net of tax of \$7,546	—	—	—	—	—	—	(11,644)	—	—
Reclassification on unrealized gains on currency									
contracts, net of tax of \$4,115	—	—	—	—	—	—	(6,359)	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	4,635	—	—
Accumulated other comprehensive income							9,499	9,499	9,499
Total comprehensive income							\$159,223		
Amortization of deferred stock compensation related to									
acquisitions, net of forfeitures	—	—	(1,888)	—	—	6,884	—	—	4,996
Acquisition of treasury stock	(9,407)	(94)	94	—	(260,746)	—	—	—	(260,746)
Stock options assumed in connection with acquisition of									
Numerical	—	—	21,696	—	—	(5,196)	—	—	16,500
Stock issued under stock option and stock purchase									
plans	18,120	184	74,840	(96,608)	356,512	—	—	—	334,928
Tax benefits associated with exercise of stock options	—	—	65,028	—	—	—	—	—	65,028
Balance at October 31, 2003	155,837	\$1,560	\$1,198,421	\$251,979	\$ (20,733)	\$(7,170)		\$9,353	\$1,433,410

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See accompanying notes to the consolidated financial statements.

SYNOPSYS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended October 31,		
	2003	2002	2001
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$ 149,724	\$(199,993)	\$ 56,802
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Amortization and depreciation	184,110	116,100	65,162
Provision for doubtful accounts	(1,577)	7,042	5,759
Write-down of long term investments	4,525	11,326	5,848
Write-down of land and property	—	14,712	—
Gain on sale of long-term investments	(22,366)	(21,299)	(57,080)
Write-down of goodwill and intangible assets	—	3,785	2,200
Deferred income taxes	(30,503)	(128,167)	(58,831)
Net change in unrealized gains and losses on foreign exchange contracts	18,107	—	—
Deferred rent	1,725	2,804	—
In-process research and development	19,850	87,700	—
Non-cash gain on sale of Silicon Libraries	—	—	(10,580)
Non-cash compensation expense	—	1,761	—
Tax benefit associated with stock options	65,028	19,460	15,993
Net changes in operating assets and liabilities:			
Accounts receivable	7,183	5,275	(5,190)
Prepaid expenses and other current assets	66,289	2,930	(231)
Other assets	(9,055)	(14,814)	(1,754)
Accounts payable and accrued liabilities	(31,840)	(77,546)	(8,072)
Accrued income taxes	(44,510)	(20,974)	54,563
Deferred revenue	5,226	5,993	229,160
Deferred compensation	9,618	2,856	1,771
Net cash provided by (used in) operating activities	<u>391,534</u>	<u>(181,049)</u>	<u>295,520</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sales and maturities of short-term investments	253,828	876,298	2,003,589
Purchases of short-term investments	(325,386)	(769,102)	(1,927,784)
Proceeds from sales of long-term investments	34,951	56,033	77,777
Purchases of long-term investments	(1,213)	(5,472)	(12,076)
Proceeds from sale of Silicon Libraries	—	—	4,122
Purchases of property and equipment	(50,148)	(48,755)	(82,490)
Cash paid for acquisitions, net of cash received	(167,744)	168,311	—
Intangible assets, net	—	—	(313)
Capitalization of software development costs	(2,616)	(1,592)	(1,000)
Net cash (used in) provided by investing activities	<u>(258,328)</u>	<u>275,721</u>	<u>61,825</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Principal payments on debt obligations	—	—	(6,162)
Issuances of common stock	334,928	119,868	105,359
Purchases of treasury stock	(260,746)	(171,677)	(331,882)
Net cash provided by (used in) financing activities	74,182	(51,809)	(232,685)
Effect of exchange rate changes on cash	4,340	(1,979)	(5,669)
Net increase in cash and cash equivalents	211,728	40,884	118,991
Cash and cash equivalents, beginning of year	312,580	271,696	152,705
Cash and cash equivalents, end of year	<u>\$ 524,308</u>	<u>\$ 312,580</u>	<u>\$ 271,696</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the year for:			
Income taxes	\$ 36,055	\$ 70,750	\$ 25,262
Non-cash transactions:			
Issuance of stock and options in exchange for net assets of Avant! . . .	\$ —	\$ 858,421	\$ —
Issuance of notes payable in Co-Design acquisition	\$ —	\$ 4,770	\$ —

See accompanying notes to consolidated financial statements.

SYNOPSYS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Description of Business

Synopsys, Inc. (Synopsys or the Company) is the world market leader in electronic design automation (EDA) software for semiconductor design. The Company delivers technology-leading semiconductor design and verification platforms to global electronics companies enabling development of complex systems-on-a-chip (SoCs). Synopsys also provides intellectual property and design services to simplify the design process and to accelerate time to market for its customers.

Note 2. Summary of Significant Accounting Policies

Fiscal Year End. The Company has a fiscal year that ends on the Saturday nearest October 31. Fiscal 2003 and 2002 were 52-week years and fiscal 2001 was a 53-week year. Fiscal 2004 will be a 52-week year. For presentation purposes, the consolidated financial statements and notes refer to the calendar month end.

Principles of Consolidation. The consolidated financial statements include the accounts of the Company and all of its subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Foreign Currency Translation. The functional currency of each of the Company's foreign subsidiaries is the foreign subsidiary's local currency except for the Company's principal Irish subsidiary, whose functional currency is the United States (U.S.) dollar. Non-functional currency monetary balances are remeasured into the functional currency of the subsidiary with any related gain or loss recorded in earnings. The Company translates assets and liabilities of its foreign operations into U.S. dollars at exchange rates in effect at the balance sheet date. The Company translates income and expense items at average exchange rates for the period. Accumulated net translation adjustments are reported in stockholders' equity, net of tax, as a component of accumulated other comprehensive income.

Use of Estimates. To prepare financial statements in conformity with generally accepted accounting principles, management must make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Fair Values of Financial Instruments. The fair value of the Company's cash, short-term investments, accounts receivable, long-term investments, forward contracts relating to certain investments in equity securities, accounts payable, long-term debt and foreign currency contracts, approximates the carrying amount, which is the amount for which the instrument could be exchanged in a current transaction between willing parties.

Cash Equivalents and Short-Term Investments. The Company classifies investments with original maturities of three months or less when acquired as cash equivalents. All of the Company's cash equivalents and short-term investments are classified as available-for-sale and are reported at fair value, with unrealized gains and losses included in stockholders' equity as a component of accumulated other comprehensive income, net of tax. The cost of securities sold is based on the specific identification method and realized gains and losses are included in other income (expense), net. The Company has cash equivalents and investments with various high quality institutions and, by policy, limits the amount of credit exposure to any one institution.

Concentration of Credit Risk. The Company sells its products worldwide primarily to customers in the global electronics market. The Company performs on-going credit evaluations of its customers' financial condition and generally does not require collateral. The Company establishes reserves for potential credit losses and such losses have been within management's expectations and have not been material in any year.

Allowance for Doubtful Accounts and Sales Returns. The Company establishes reserves for potential credit losses including a specific reserve for any particular receivable when collectibility is not probable. In addition, the Company provides a general reserve on all accounts receivable based on a specified range of percentages of the outstanding balance in each aged group. Such losses have been within management's expectations and have not been material in any year. The following table provides a rollforward of the changes in the allowance for doubtful accounts and sales returns.

<u>Fiscal Year</u>	<u>Balance at Beginning of Period</u>	<u>Additions (Deductions) Charged to (Removed from) Expense</u>	<u>Deductions⁽¹⁾</u>	<u>Balance at End of Period</u>
		<i>(in thousands)</i>		
2003	\$11,565	\$(1,577)	\$1,693	\$ 8,295
2002	\$11,027	\$ 7,042	\$6,504	\$11,565
2001	\$ 9,539	\$ 5,759	\$4,271	\$11,027

(1) Accounts written off, net of recoveries.

Income Taxes. The Company accounts for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Property and Equipment. Property and equipment is recorded at cost. Assets are depreciated using the straight-line method over their estimated useful lives ranging from three to five years. Leasehold improvements are depreciated using the straight-line method over the remaining term of the lease or the economic useful life of the asset, whichever is shorter. The cost of repairs and maintenance is charged to operations as incurred and was \$15.1 million, \$11.9 million and \$10.5 million in fiscal 2003, 2002 and 2001, respectively. A detail of property and equipment is as follows:

	<u>October 31,</u>	
	<u>2003</u>	<u>2002</u>
	<i>(in thousands)</i>	
Computer and other equipment	\$ 316,985	\$ 279,239
Buildings	21,821	21,821
Furniture and fixtures	27,629	26,446
Land	42,754	42,754
Leasehold improvements	66,566	61,796
	475,755	432,056
Less accumulated depreciation and amortization	(291,442)	(247,016)
Total property and equipment, net	\$ 184,313	\$ 185,040

Software Development Costs. Capitalization of software development costs begins upon the establishment of technological feasibility, which is generally the completion of a working prototype. Software development costs capitalized were \$2.6 million, \$1.6 million and \$1.0 million in fiscal 2003, 2002 and 2001, respectively. Amortization of software development costs is computed based on the straight-line method over the software's estimated economic life of approximately two years. The Company recorded amortization of \$1.6 million, \$1.1 million and \$1.0 million in fiscal 2003, 2002 and 2001, respectively.

Goodwill and Intangible Assets. Goodwill represents the excess of the aggregate purchase price over the fair value of the tangible and identifiable intangible assets acquired by the Company. Intangible assets consist of purchased technology, contract rights intangibles, customer installed base/relationship, trademarks and tradenames, covenants not to compete, customer backlog and capitalized software. Intangible assets are amortized on a straight-line basis over their estimated useful lives which range from three to ten years. Amortization of intangible assets was \$123.2 million, \$61.1 million and \$17.0 million in fiscal 2003, 2002 and 2001, respectively.

In fiscal 2002, the Company recognized an aggregate impairment charge of \$3.8 million to reduce the amount of certain intangible assets associated with prior acquisitions to their estimated fair value. Approximately \$3.7 million and \$0.1 million are included in integration expense and amortization of intangible assets, respectively, on the statement of operations. The impairment charge is primarily attributable to certain technology acquired from and goodwill related to the acquisition of Stanza, Inc. (Stanza) in 1999. The Company determined that it would not allocate future resources to assist in the market growth of this technology as products offered by Avant! Corporation (Avant!) provide customers with similar capabilities as well as additional functionality. As a result, the Company does not anticipate any future sales of the Stanza product.

In fiscal 2001, the Company recognized an aggregate impairment charge of \$2.2 million to reduce the amount of certain intangible assets associated with prior acquisitions to their estimated fair value. Approximately \$1.8 million and \$0.4 million are included in cost of revenues and amortization of intangible assets, respectively, on the statement of operations. The impairment charge is attributable to certain technology acquired from and goodwill related to the acquisition of Eagle Design Automation, Inc. (Eagle) in 1997. The Company determined that it would not allocate future resources to assist in the market growth of this technology. As a result, the Company does not anticipate any future sales of the Eagle product.

Accounts Payable and Accrued Liabilities. Accounts payable and accrued liabilities consist of:

	October 31,	
	2003	2002
	<i>(in thousands)</i>	
Payroll and related benefits	\$122,137	\$106,155
Acquisition related costs	4,627	66,874
Other accrued liabilities	65,687	56,544
Accounts payable	11,775	18,639
Total accounts payable and accrued liabilities	<u>\$204,226</u>	<u>\$248,212</u>

Deferred Compensation Plan. The Company maintains a deferred compensation plan (the Plan) which permits certain employees to defer up to 50% of their annual cash base compensation or 100% of their annual cash variable compensation. Distributions from the Plan are generally payable upon cessation of employment over five to 15 years or as a lump sum payment at the option of the employee. Undistributed amounts under the Plan are subject to the claims of the Company's creditors. As of October 31, 2003 and 2002, the invested amounts under the Plan total \$31.3 million and \$22.8 million, respectively, and are recorded as a long-term asset on the Company's balance sheet. As of October 31, 2003 and 2002, the Company has recorded \$32.5 million and \$22.9 million, respectively, as a long-term liability to recognize undistributed amounts due to employees.

Stock Split. On September 23, 2003, the Company completed a two-for-one stock split in the form of a stock dividend. All common share and per share data for all periods presented have been adjusted to reflect the stock split.

Other Comprehensive Income. The Company records comprehensive income in accordance with Statement of Financial Accounting Standards No. 130, *Reporting Comprehensive Income*, which establishes standards for reporting and displaying comprehensive net income and its components in the financial statements. Comprehensive income, as defined, includes all changes in equity during a period from non-owner sources, such as accumulated net translation adjustments, unrealized gains on certain foreign currency forward contracts that qualify as cash flow hedges and reclassification adjustments related to unrealized gains on investments. Reclassification adjustments decrease other comprehensive income for gains on the sale of available-for-sale securities realized during the current year and are included in other comprehensive income as unrealized holding gains in the period in which such unrealized gains arose.

Revenue Recognition. Synopsys has designed and implemented revenue recognition policies in accordance with Statement of Position (SOP) 97-2, Software Revenue Recognition, as amended by SOP 98-9, Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions, and SOP 98-4, Deferral of the Effective Date of a Provision of SOP 97-2, Software Revenue Recognition.

With respect to software sales, Synopsys utilizes three license types:

- Technology Subscription Licenses (TSLs), which are for a finite term, on average approximately three years, and generally provide the customer limited rights to receive, or to exchange certain quantities of licensed software for, unspecified future technology. Post-contract customer support (maintenance or PCS) is bundled for the term of the license and not charged for separately.
- Term licenses, which are also for a finite term, usually two to three years, 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, which 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. The annual maintenance fee for purchases under \$2 million is typically calculated as a percentage of the list price of the licensed software; for purchases over \$2 million, the annual maintenance fee is typically calculated as a percentage of the net license fee.

The Company reports revenue in three categories: upfront license revenue, time-based license revenue and services.

Upfront license revenue includes:

- Perpetual licenses. The Company recognizes the perpetual license fee in full if, upon shipment of the software, payment terms require the customer to pay at least 75% of the perpetual license fee within one year from shipment.
- Upfront term licenses. The Company recognizes the term license fee in full if, upon shipment of the software, payment terms require the customer to pay at least 75% of the term license fee within one year from shipment.

Time-based license revenue includes:

- Technology Subscription Licenses. The Company typically recognizes revenue from TSL license fees (which include bundled maintenance) ratably over the term of the license period. However, where extended payment terms (as discussed below) are offered under the license arrangement, the

Company recognizes revenue from TSL license fees in an amount that is the lesser of the ratable portion of the entire fee or customer installments as they become due and payable.

- Term Licenses with Extended Payment Terms. For term licenses where less than 75% of the term license fee is due within one year from shipment, the Company recognizes revenue as customer installments become due and payable.

Services revenue includes:

- Maintenance Fees Associated with Perpetual and Term Licenses. The Company generally recognizes revenue from maintenance associated with perpetual and term licenses ratably over the maintenance term.
- Consulting and Training Fees. The Company generally recognizes revenue from consulting and training services as services are performed.

The Company allocates revenue on software arrangements involving multiple elements to each element based on the relative fair values of the elements. The Company's determination of fair value of each element in multiple element arrangements is based on vendor-specific objective evidence (VSOE). The Company limits its assessment of VSOE for each element to the price charged when the same element is sold separately.

The Company has analyzed all of the elements included in its multiple-element arrangements and determined that it has sufficient VSOE to allocate revenue to the maintenance components of its perpetual and term license products and to consulting. Accordingly, assuming all other revenue recognition criteria are met, revenue from perpetual and term licenses is recognized upon delivery using the residual method in accordance with SOP 98-9 and revenue from maintenance is recognized ratably over the maintenance term.

Customers occasionally request the right to convert their existing TSLs to perpetual licenses. Customers pay an incremental fee to convert the TSL to a perpetual license, which the Company recognizes upon contract signing, in accordance with AICPA Technical Practice Aid (TPA) 5100.74, assuming all other revenue recognition criteria have been met. In some situations, the contract converting the TSL to a perpetual term license is modified to such an extent that a new arrangement exists. The changes to the contract may include increases or decreases in the total technology under license, changes in payment terms, changes in license terms and other pertinent factors. In these situations, the Company accounts for all of the arrangement fees as a new sale and recognizes revenue when all other revenue recognition criteria have been met. The Company has a policy that defines the specific circumstances under which such transactions are accounted for as a new perpetual license sale.

The Company makes significant judgments related to revenue recognition. Specifically, in connection with each transaction involving its products (referred to as an "arrangement" in the accounting literature), the Company must evaluate whether: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) its fee is fixed or determinable, and (iv) collectibility is probable. The Company applies these criteria as discussed below.

- Persuasive Evidence of an Arrangement Exists. The Company's customary practice is to have a written contract, signed by both the customer and the Company, or a purchase order from those customers that have previously negotiated a standard end-user license arrangement or volume purchase agreement prior to recognizing revenue on an arrangement.
- Delivery Has Occurred. The Company delivers software to its customers physically or electronically. For physical deliveries, the standard transfer terms are typically FOB shipping point. For electronic deliveries, delivery occurs when the Company provides the customer access codes, or "keys," that allow the customer to take immediate possession of the software on its hardware.

- The Fee is Fixed or Determinable. The Company's standard payment terms require 75% or more of the arrangement fee to be paid within one year. Where these terms apply, the Company regards the fee as fixed or determinable, and the Company recognizes revenue upon delivery (assuming other revenue recognition criteria are met). If the payment terms do not meet this standard, which we refer to as "extended payment 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 application of other revenue accounting guidelines.
- Collectibility is Probable. To recognize revenue, the Company must judge collectibility of the arrangement fees, which it does on a customer-by-customer basis pursuant to its credit review policy. The Company typically sells to customers with whom it has a history of successful collection. For a new customer, the Company evaluates the customer's financial position and ability to pay and typically assigns a credit limit based on that review. The Company increases the credit limit only after it has established a successful collection history with the customer. If the Company determines at any time that collectibility is not probable based upon its credit review process or the customer's payment history, the Company recognizes revenue on a cash-collected basis.

Earnings Per Share. The Company computes basic earnings per share using the weighted-average number of common shares outstanding during the period. The Company computes diluted earnings per share using the weighted-average number of common shares and dilutive stock options outstanding during the period; the number of weighted-average dilutive stock options outstanding is computed using the treasury stock method. Due to the net loss incurred for fiscal 2002, the effect of employee stock options is anti-dilutive in that period.

The table below reconciles the weighted-average common shares used to calculate basic net income per share with the weighted-average common shares used to calculate diluted net income per share.

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	<i>(in thousands)</i>		
Weighted-average common shares for basic net income (loss) per share	151,251	133,616	121,202
Weighted-average dilutive stock options outstanding under the treasury stock method	<u>7,075</u>	<u>—</u>	<u>8,116</u>
Weighted-average common shares for diluted net income (loss) per share	<u>158,326</u>	<u>133,616</u>	<u>129,318</u>

The effect of dilutive employee stock options excludes approximately 12.0 million, 56.0 million and 7.6 million stock options for fiscal 2003, 2002 and 2001, respectively, which were anti-dilutive for net income per share calculations.

Stock-Based Compensation. As permitted by Statement of Financial Accounting Standards No. 123 (SFAS 123), *Accounting for Stock-Based Compensation*, the Company has elected to use the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25 (APB 25), *Accounting for Stock Issued to Employees*, to measure compensation expense for stock-based awards to employees. Accordingly, the Company generally recognizes no compensation expense with respect to stock-based awards to employees as awards are issued with exercise prices equal to the fair value of the common stock on the grant date. The Company has determined pro forma information regarding net income and earnings per share as if the Company had accounted for employee stock options under the fair value method as required by SFAS No. 123. The fair value of these stock-based awards to employees was

estimated using the Black-Scholes option pricing model, assuming no expected dividends and using the following weighted-average assumptions:

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	Stock Option Plans		
Expected life (in years)	5.1	4.9	4.4
Risk-free interest rate	2.9%	4.0%	4.8%
Volatility	57.8%	59.0%	62.0%
	ESPP		
Expected life (in years)	1.25	1.25	1.25
Risk-free interest rate	1.3%	2.1%	4.1%
Volatility	58.6%	59.0%	62.0%

For pro forma purposes, the estimated fair value of the Company's stock-based awards to employees is amortized over the options' vesting period of four years and the ESPP's six-month purchase period. The weighted-average estimated fair value of stock options issued during fiscal 2003, 2002 and 2001 was \$13.06, \$12.87 and \$12.81 per share, respectively. The weighted-average estimated fair value of share purchase rights under the ESPP during fiscal 2003, 2002 and 2001 was \$6.16, \$7.49 and \$6.16 per share, respectively. The Company's pro forma net income and earnings per share data under SFAS No. 123 is as follows:

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	<i>(in thousands, except per share amounts)</i>		
Net income (loss), as reported under APB 25	\$149,724	\$(199,993)	\$ 56,802
Stock-based employee compensation included in net income (loss)	4,996	1,522	—
Stock-based employee compensation expense determined under the fair value based method for all awards, net of related tax effects	(99,522)	(85,974)	(88,912)
Pro forma net income (loss) under SFAS 123	\$ 55,198	\$(284,445)	\$(32,110)
Earnings (loss) per share—basic			
As reported under APB 25	\$ 0.99	\$ (1.50)	\$ 0.47
Pro forma under SFAS 123	\$ 0.36	\$ (2.13)	\$ (0.26)
Earnings (loss) per share—diluted			
As reported under APB 25	\$ 0.95	\$ (1.50)	\$ 0.44
Pro forma under SFAS 123	\$ 0.36	\$ (2.13)	\$ (0.26)

Foreign Currency Contracts. The Company operates internationally and is exposed to potentially adverse movements in currency exchange rates. The Company enters into foreign currency forward contracts to reduce its exposure to foreign currency rate changes on non-functional currency denominated forecasted transactions and balance sheet positions. These foreign currency contracts are carried at fair value, have a duration of approximately 30 days and are denominated primarily in the Euro and the Japanese yen. As of October 31, 2003, 2002, and 2001, the Company had \$143.1 million, \$305.1 million and \$72.2 million, respectively, of short-term foreign currency forward contracts outstanding. The contract value approximates fair value.

The components of the Company's foreign currency forward contracts related to forecasted transactions are designated as cash flow hedges, with gains and losses recorded in stockholders' equity and reclassified into earnings at the time the forecasted transactions occur. As of October 31, 2003, an unrealized gain of approximately \$19.3 million is recorded in stockholders' equity, net of tax, as a component of accumulated other comprehensive income. The maximum length of time over which the Company is hedging its exposure to the variability in future cash flows for forecasted transactions is approximately three years.

Hedging effectiveness is evaluated monthly using spot rates, with any gain or loss caused by hedging ineffectiveness reclassified to earnings as other income (expense). The premium/discount component of the forward contracts is amortized to other income (expense) and is not included in evaluating hedging effectiveness.

The earnings impact of gains and losses on foreign currency forward contracts, net of foreign currency remeasurement gains and losses, was immaterial for the fiscal years ended October 31, 2003, 2002, and 2001.

Effective May 4, 2003, the Company changed the functional reporting currency of its principal Irish subsidiary to the U.S. dollar from the Euro because an increasing percentage of its sales in Europe and Asia, and the resulting accounts receivable are denominated in U.S. dollars.

Reclassifications. Certain prior year amounts have been reclassified to conform to current year presentation.

Effect of New Accounting Standards. In May 2003, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 150 (SFAS 150), *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*. SFAS 150 establishes standards to classify and measure certain financial instruments with characteristics of both liabilities and equity. SFAS 150 is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. SFAS 150 is to be implemented by reporting the cumulative effect of a change in an accounting principle for financial instruments created before the issuance date of the statement and still existing at the beginning of the interim period of adoption. The Company adopted SFAS 150 as of the beginning of its fourth quarter. The adoption of SFAS 150 did not have a significant impact on the Company's financial position or results of operations.

In April 2003, the FASB issued Statements of Financial Accounting Standards No. 149 (SFAS 149), *Amendment of Statement 133 on Derivative Instruments and Hedging Activities*. SFAS 149 amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under FASB Statement of Financial Accounting Standards No. 133, *Accounting for Derivative Instruments and Hedging Activities*. SFAS 149 is generally effective for contracts entered into or modified after June 30, 2003, and for hedging relationships designated after June 30, 2003. The adoption of SFAS 149 did not have a significant impact on the Company's financial position or results of operations.

In January 2003, the FASB issued Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities*. Variable interest entities are created for a single specified purpose, for example, to facilitate securitization, leasing, hedging, research and development, or other transactions or arrangements. This interpretation of Accounting Research Bulletin No. 51, *Consolidated Financial Statements*, defines a variable interest entity and provides guidelines on identifying and assessing an enterprise's interests in a variable interest entity in order to determine whether to consolidate that entity. Generally, FIN 46 applies to variable interest entities created after January 31, 2003 and to variable interest entities in which an enterprise obtains an interest after that date. For existing variable interest entities in which an enterprise holds a variable interest that it acquired before February 1, 2003, the provision of this interpretation will apply no later than the beginning of the first interim or annual reporting period beginning after June 15, 2003. The adoption of FIN 46 did not have a significant impact on the Company's financial position or results of operations.

In December 2002, the FASB issued Statement of Financial Accounting Standards No. 148 (SFAS 148), *Accounting for Stock-Based Compensation—Transition and Disclosure*. SFAS 148 amends FASB Statement No. 123, *Accounting for Stock-Based Compensation*, to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the

method used on reported results. The transition guidance and annual disclosure provisions of SFAS 148 are effective for fiscal years ending after December 15, 2002. The interim disclosure provisions are effective for financial reports containing financial statements for interim periods beginning after December 15, 2002. The Company adopted the disclosure provisions of SFAS 148 beginning in the first quarter of fiscal 2003.

In November 2002, the FASB issued FASB Interpretation No. 45 (FIN 45), *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, which clarifies disclosure and recognition/measurement requirements related to certain guarantees. The disclosure requirements are effective for financial statements issued after December 15, 2002, and the recognition/measurement requirements are effective on a prospective basis for guarantees issued or modified after December 31, 2002. We typically 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 indemnify our customers from third party claims of intellectual property infringement relating to the use of our products. Historically, costs related to these guarantees have not been significant, and we are unable estimate the potential impact of these guarantees on our future results of operations.

In July 2001, the FASB issued Statements of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*. The Company adopted SFAS 142 on November 1, 2002 and ceased amortizing goodwill recorded for business combinations consummated prior to July 1, 2001. In addition, as of November 1, 2002, the Company assessed the useful lives and residual values of all acquired intangible assets recorded on the balance sheet and also tested goodwill for impairment per SFAS 142. In the Company's impairment analysis, Synopsys determined it has one reporting unit. The Company completed the goodwill impairment review as of the beginning of fiscal 2003 and found no indicators of impairment. This impairment review was based on the fair value of the Company as determined by its market capitalization. All remaining and future acquired goodwill will be subject to an impairment test in the fourth quarter of each fiscal year. As of October 31, 2003, unamortized goodwill was \$550.7 million, which, in accordance with SFAS 142, the Company will not amortize.

Note 3. Business Combinations and Divestitures

Purchase Combinations. During fiscal 2003 and 2002, the Company made a number of purchase acquisitions. There were no purchase transactions during fiscal 2001. For each acquisition, the excess of the purchase price over the estimated value of the net tangible assets acquired was allocated to various intangible assets, consisting primarily of developed technology, customer- and contract-related assets and goodwill. The values assigned to developed technologies related to each acquisition were based upon future discounted cash flows related to the existing products' projected income streams. The amounts allocated to purchased in-process research and development were determined through established valuation techniques in the high-technology industry and were expensed upon acquisition because technological feasibility had not been established and no future alternative uses existed.

Pro forma results of operations are presented only for certain material acquisitions since the effects of the remaining fiscal 2003 and 2002 acquisitions are not material to the Company's consolidated financial position, results of operations or cash flows for the periods presented. The consolidated financial statements include the operating results of each business from the date of acquisition.

Fiscal 2003 Acquisitions

Numerical Technologies, Inc. (Numerical). On March 1, 2003, the Company completed its acquisition of Numerical.

Reasons for the Acquisition. In approving the merger, management considered a number of factors, including its opinion that combining Numerical's subwavelength, lithography-enabling solutions with Synopsys' leading integrated circuit (IC) design solutions would enable Synopsys to further reduce costs and manufacturing risk for its customers as they create smaller, faster and more power-efficient ICs. The foregoing discussion of the

information and factors considered by the Board of Directors (the Board) is not intended to be exhaustive but includes the material factors considered by the Board.

Purchase Price. The Company paid Numerical common stock holders \$7.00 in cash in exchange for each share of Numerical common stock owned as of the merger date, or approximately \$240.2 million. The total purchase consideration consisted of:

	<i>(in thousands)</i>
Cash paid for Numerical common stock	\$240,214
Acquisition-related costs	10,044
Fair value of options to purchase Synopsys common stock issued, less \$5.2 million representing the portion of the intrinsic value of Numerical's unvested options applicable to the remaining vesting period	16,500
	<u>\$266,758</u>

Acquisition-related costs of \$10.0 million consisted primarily of legal and accounting fees of \$2.7 million and other directly related charges including \$5.2 million in restructuring costs and \$1.6 million in directors and officers liability insurance costs incurred to cover Numerical's former officers and Board of Directors as required by the merger agreement. As of October 31, 2003, the Company had paid \$8.3 million of the acquisition-related costs and \$0.4 million of the original accrual was reversed. Of the balance remaining of \$1.3 million as of October 31, 2003, \$0.9 million represents facilities closure costs.

The following table summarizes the allocation of the purchase price for Numerical and the estimated amortization period for the acquired intangibles:

	<i>(in thousands)</i>
Cash, cash equivalents and short-term investments	\$ 79,461
Accounts receivable	4,904
Prepaid expenses and other current assets	3,368
Identifiable intangible assets:	
Core/developed technology ⁽¹⁾	22,580
Customer relationships ⁽²⁾	20,120
Customer backlog ⁽¹⁾	4,870
Goodwill	140,102
Other assets	5,584
Total assets acquired	<u>280,989</u>
Accounts payable and accrued liabilities	8,163
Deferred revenue	3,627
Deferred tax liabilities	20,691
Total liabilities assumed	<u>32,481</u>
Net assets acquired	248,508
In-process research and development	18,250
Purchase price	<u>\$266,758</u>

(1) Estimated useful life is 3 years.

(2) Estimated useful life is 6 years.

Goodwill and Intangible Assets. Goodwill, representing the excess of the purchase consideration over the fair value of net tangible and identifiable intangible assets acquired in the Numerical merger, will not be amortized and is not deductible for tax purposes. Except for amortization of the core/developed technology and backlog (which are included in cost of revenue in the statement of operations for fiscal 2003), the Company includes amortization of the intangible assets in operating expenses in its statement of operations.

Unaudited Pro Forma Results of Operations. The following table presents pro forma results of operations and gives effect to the Numerical acquisition as if the acquisition was consummated at the beginning of fiscal 2002. The Company has not included the effect of its other fiscal 2003 acquisitions as if the acquisitions were consummated at the beginning of fiscal 2002 because the effects of these acquisitions were not material. The Company's results of operations may have been different than those shown below if the Company had actually acquired Numerical at the beginning of fiscal 2002. Pro forma results below do not necessarily indicate future operating results.

	<u>Year Ended October 31,</u>	
	<u>2003</u>	<u>2002</u>
	<i>(in thousands, except per share amounts)</i>	
Revenue ⁽¹⁾	\$1,193,544	\$ 956,280
Net income ⁽²⁾	\$ 138,862	\$(266,132)
Basic earnings per share	\$ 0.92	\$ (1.99)
Weighted-average common shares outstanding ⁽³⁾	151,251	133,616
Diluted earnings per share	\$ 0.88	\$ (1.99)
Weighted-average common shares and dilutive stock options outstanding ⁽³⁾	158,326	133,616

- (1) Fiscal 2002 pro forma results of operations and fiscal 2003 pro forma results of operations for the period from November 1, 2002 through February 28, 2003 include Numerical's reported revenue in the periods Numerical recognized such revenues. However, the purchase method of accounting requires Synopsys to reduce Numerical's reported deferred revenue to an amount equal to the fair value of the legal liability, resulting in lower revenue in periods following the merger than Numerical would have achieved as a separate company. Therefore, revenues from Numerical products for the period from March 1, 2003 to October 31, 2003 included in the pro forma results of operations reflect the lower amortization of deferred revenue stemming from this purchase accounting adjustment.
- (2) Pro forma net income for fiscal 2003 includes in-process research and development costs of \$19.9 million from fiscal 2003 acquisitions.
- (3) The calculations of the weighted-average common shares outstanding and weighted-average common shares and dilutive stock options outstanding for fiscal 2002 includes the impact of the shares issued in the acquisition of Avant! as of the acquisition date as discussed below.

Other Fiscal 2003 Acquisitions. During fiscal 2003, the Company completed two additional acquisitions for aggregate consideration consisting of \$8.8 million in upfront payments and acquisition expenses and contingent consideration totaling \$3.5 million based on the achievement of certain milestones as outlined in the merger agreements. In-process research and development expenses associated with these acquisitions totaled \$1.6 million for fiscal 2003. These acquisitions are not considered material to the Company's balance sheet and results of operations.

Fiscal 2002 Acquisitions

Avant! Corporation. On June 6, 2002, the Company completed its acquisition of Avant!.

Reasons For the Acquisition. The Board unanimously approved the merger with Avant! at its December 1, 2001 meeting. In approving the merger agreement, the Board consulted with legal and financial advisors as well as with management and considered a number of factors. These factors included the fact that the merger was expected to enable Synopsys to offer its customers a complete end-to-end solution for system-on-chip design that combines Synopsys' logic synthesis and design verification tools with Avant!'s advanced place and route, physical verification and design integrity products, thus increasing customers' design efficiencies. By increasing customer design efficiencies, Synopsys expected to be able to better compete for customers designing the next generation of semiconductors. Further, by gaining access to Avant!'s physical design and verification products, as well as its broad customer base and relationships, Synopsys would gain new opportunities to market its existing products. The foregoing discussion of the information and factors considered by the Board is not intended to be exhaustive but includes the material factors the Board considered.

Purchase Price. Holders of Avant! common stock received 0.371 of a share of Synopsys' common stock (including the associated preferred stock rights) in exchange for each share of Avant! common stock owned as of the closing date, aggregating 14.5 million shares of Synopsys common stock. The fair value of the Synopsys' shares issued was based on a per share value of \$54.74, which was equal to Synopsys' average last sale price per share as reported on the Nasdaq National Market for the trading-day period two days before and after December 3, 2001, the date of the merger agreement.

The total purchase consideration consists of the following:

	<i>(in thousands)</i>
Fair value of Synopsys common stock issued	\$795,388
Acquisition-related costs	119,471
Fair value of options to purchase Synopsys common stock issued, less \$8.1 million representing the portion of the intrinsic value of Avant!'s unvested options applicable to the remaining vesting period	63,033
	<u>\$977,892</u>

Acquisition-related costs consist of the following:

<i>(in thousands)</i>	Balance June 6, 2002	Additions	Payments	Balance October 31, 2002	Payments	Reversals	Balance October 31, 2003
Facilities closure costs	\$ 62,638	\$ —	\$ (5,377)	\$57,261	\$(25,119)	\$(31,578) ⁽²⁾	\$ 564
Employee severance costs ...	50,367	647 ⁽¹⁾	(50,724)	290	(290)	—	—
Other acquisition-related costs	37,342	55	(33,557)	3,840	(1,580)	—	2,260
Total	<u>\$150,347</u>	<u>\$702</u>	<u>\$(89,658)</u>	<u>\$61,391</u>	<u>\$(26,989)</u>	<u>\$(31,578)</u>	<u>\$2,824</u>

(1) During fiscal 2002, additions were made to increase the total acquisition related costs including an increase to employee severance costs of \$0.6 million for actual amounts paid to such employees.

(2) Synopsys settled claims of one of the two landlords of these buildings during the first quarter of fiscal 2003 for \$7.4 million, and settled the claims of the other landlord during the second quarter of fiscal 2003 for \$15.0 million. Resolving these contingencies reduced the amount allocated to liabilities and goodwill by \$31.6 million.

As of October 31, 2003, \$116.6 million of costs have been paid. The remaining acquisition-related costs of \$2.3 million consist primarily of liquidation fees.

Facilities closure costs at the closing date include \$54.2 million related to Avant!'s corporate headquarters. After the merger, Synopsys consolidated the functions performed in the buildings into its corporate facilities. The lessors brought a claim against Avant! for the future amounts payable under the lease agreements. The amount accrued at the closing date was equal to the future amounts payable under the related lease agreements, without taking into consideration in the accrual any defenses the Company may have had to the claim. Synopsys settled the claims of one of the two landlords of these buildings during the first quarter of fiscal 2003 for \$7.4 million, and settled the claims of the other landlord during the second quarter of fiscal 2003 for \$15.0 million. Resolving these contingencies reduced the amount allocated to liabilities and goodwill by \$31.6 million. The \$0.6 million remaining facilities closure cost is the present value of the future obligations under certain of Avant!'s other lease agreements which the Company has or intends to terminate under an approved facilities exit plan, plus additional costs the Company expects to incur directly related to vacating such facilities.

Employee severance costs include (i) \$39.6 million in cash paid to Avant!'s Chairman of the Board, consisting of severance plus a cash payment equal to the intrinsic value of his in-the-money stock options at the closing date, (ii) \$5.1 million in cash severance payments paid to redundant employees (primarily sales and corporate infrastructure personnel) terminated on or subsequent to the consummation of the merger under an

approved plan of termination, and (iii) \$6.3 million in termination payments to certain executives in accordance with their respective pre-merger employment agreements. The total number of Avant! employees terminated as a result of the merger was approximately 250.

Other acquisition-related costs of \$37.4 million consist primarily of banking, legal and accounting fees, printing costs and other directly related charges including contract termination costs of \$6.3 million.

The following table summarizes the allocation of the purchase price for Avant! and the estimated amortization period for the acquired intangibles:

	<i>(in thousands)</i>
Cash, cash equivalents and short-term investments	\$ 241,313
Accounts receivable	61,635
Prepaid expenses and other current assets	17,067
Identifiable intangible assets:	
Core/developed technology ⁽¹⁾	189,800
Contract rights intangible ⁽¹⁾	51,700
Customer installed base/relationship ⁽²⁾	102,900
Trademarks and tradenames ⁽¹⁾	17,700
Covenants not to compete ⁽³⁾	9,100
Customer backlog ⁽¹⁾	2,100
Goodwill	342,810
Other assets	5,788
Total assets acquired	<u>1,041,913</u>
Accounts payable and accrued liabilities	22,516
Deferred revenue	30,080
Income taxes payable	89,274
Other liabilities	4,651
Total liabilities assumed	<u>146,521</u>
Net assets acquired	895,392
In-process research and development	82,500
Purchase price	<u>\$ 977,892</u>

(1) Estimated useful life is 3 years.

(2) Estimated useful life is 6 years.

(3) Estimated useful life ranges from 2 to 4 years depending on life of the related agreement.

The initial allocation of the purchase price included certain assets and liabilities recorded using preliminary estimates of fair value. During fiscal 2002, the value assigned to Avant!'s investment in a venture capital fund was reduced from the preliminary value of \$12.8 million to \$5.0 million upon obtaining additional information on the venture fund's non-public investments and subsequent sale of the investment to a third party. The decrease in the fair value of the investment increased the consideration allocated to goodwill by \$7.8 million. During fiscal 2002, the Company also increased the value of the acquired customs and use-tax liabilities by \$2.5 million, resulting in a corresponding increase in goodwill.

Asset Held for Sale. As a result of the merger, Synopsys acquired Avant!'s physical libraries business, and Synopsys was obligated to offer and sell such business to Artisan Components, Inc. (Artisan) under the terms of a January 2001 non-compete agreement, under which Synopsys agreed not to engage, directly or indirectly, in the physical libraries business before January 3, 2003. As of the closing date, the value allocated to the acquired libraries business had been recorded as net assets held for sale, based on the estimated future net cash flows from

the libraries business in accordance with EITF 87-11, *Allocation of Purchase Price to Assets to Be Sold*. During fiscal 2002, management determined that the libraries business would not be sold and, accordingly, allocated the fair value of the libraries business as of the closing date to the underlying tangible assets and intangible assets. The fair value allocated to the tangible and intangible assets was \$8.3 million, with the remaining fair value allocated to goodwill. This allocation is reflected in the balance sheet as of October 31, 2002.

Goodwill and Intangible Assets. Goodwill, representing the excess of the purchase price over the fair value of net tangible and identifiable intangible assets acquired in the merger, will not be amortized, consistent with the guidance in SFAS 142 (see Note 2). The goodwill associated with the Avant! merger is not deductible for tax purposes.

Contract Rights Intangible. Avant! had executed signed license agreements and delivered the initial configuration of licensed technologies under ratable license arrangements, and had executed signed contracts to provide maintenance over a one- to three-year period, for which Avant! did not consider the fees to be fixed and determinable at the outset of the arrangement. There were no receivables or deferred revenues recorded on Avant!'s historical financial statements at the closing date as the related payments were not yet due under extended payment terms and deliveries are scheduled to occur over the terms of the arrangements. These ratable licenses and maintenance arrangements require future performance by both parties and, as such, represent executory contracts. The contract rights intangible asset associated with these arrangements is being amortized to cost of revenue over the related contract lives of three years.

The amortization of intangible assets, with the exception of the contract rights intangible and core/developed technology, is included in operating expenses in the statement of operations for fiscal 2003 and 2002. Amortization of core/developed technology and contract rights intangible is included in cost of revenue.

Cadence Design Systems, Inc. (Cadence) Litigation. At the time of the acquisition of Avant!, Avant! was engaged in civil litigation with Cadence regarding alleged misappropriation of trade secrets, among other things, by Avant! and certain individuals.

In connection with the merger, Synopsys entered into a policy with a subsidiary of American International Group, Inc., a AAA-rated insurance company, whereby insurance was obtained for certain compensatory, exemplary and punitive damages, penalties and fines and attorneys' fees arising out of pending litigation between Avant! and Cadence. The policy did not provide coverage for litigation other than the Avant!/Cadence litigation.

The Company paid a total premium of \$335.8 million for the policy, of which \$240.8 million was contingently refundable. The balance of the premium paid to the insurer of \$95.0 million was included in integration expense for fiscal 2002. Under the policy, the insurer was obligated to pay covered loss up to a limit of liability equaling (i) \$500.0 million plus (ii) interest accruing at the fixed rate of 2%, compounded semi-annually, on \$250.0 million (the interest component), as reduced by previous covered losses. Interest earned on \$250.0 million was included in other income, net in the post-merger consolidated statement of operations for fiscal 2002.

On November 13, 2002, Cadence and Synopsys reached a settlement of the litigation. Under the terms of the agreement, Synopsys paid Cadence \$265.0 million in two installments—\$20.0 million on November 22, 2002 and \$245.0 million on December 16, 2002. In addition, Cadence and Synopsys have entered into reciprocal license arrangements covering the intellectual property at issue in the litigation. As a result of the payment, Synopsys has recognized expense of approximately \$240.8 million, which equals the contingently refundable portion of the insurance premium plus interest accrued on the refundable portion. This expense is included in other income (expense), net on the consolidated statement of operations in fiscal 2002.

Co-Design Automation, Inc. (Co-Design). On September 6, 2002, the Company completed its acquisition of Co-Design.

Reasons for the Acquisition. In approving the merger agreement, management considered a number of factors, including its belief that (i) the acquisition would help promote the development and adoption of the Superlog language, which Synopsys believes can increase designer productivity; (ii) the combination of Co-Design's technology with Synopsys' high-level verification and design implementation tools was expected to improve the performance of Synopsys' products; and (iii) the acquisition would give Synopsys access to Co-Design's highly-skilled employees who would help Synopsys improve its existing products and facilitate the development of new products. The foregoing discussion of the information and factors considered by Synopsys' management is not intended to be exhaustive but includes the material factors considered.

Purchase Price. Holders of Co-Design common stock received consideration consisting of cash and notes totaling \$32.7 million in exchange for all shares of Co-Design common stock owned as of the merger date. The total purchase consideration consisted of the following:

	<i>(in thousands)</i>
Cash paid for Co-Design common stock	\$29,783
Notes payable	2,897
Acquisition-related costs	1,038
Fair value of options to purchase Synopsys common stock issued, less \$0.7 million representing the portion of the intrinsic value of Co-Design's unvested options applicable to the remaining vesting period	593
	<u>\$34,311</u>

The acquisition-related costs of approximately \$1.0 million consisted primarily of legal and accounting fees. As of October 31, 2003, substantially all of these acquisition-related costs have been paid.

The following table summarizes the allocation of the purchase price for Co-Design and the estimated amortization period for the acquired intangibles:

	<i>(in thousands)</i>
Current assets	\$ 3,532
Identifiable intangible assets:	
Core/developed technology ⁽¹⁾	6,200
Goodwill	27,659
Other assets	1,220
Total assets acquired	38,611
Escrow payable	3,443
Other current liabilities	857
Total liabilities assumed	4,300
Net assets acquired	<u>\$34,311</u>

(1) Estimated useful life is 10 years.

Notes of \$4.8 million are payable to former Co-Design shareholders, of which \$1.9 million was included in integration expense in the statement of operations for services performed in fiscal 2002 and the remainder was an element of the purchase price. An aggregate of \$4.1 million of these notes will be paid in September 2007. The remaining notes are subject to prepayment in September 2004 if certain milestones are met.

inSilicon Corporation (inSilicon). On September 20, 2002, the Company completed its acquisition of inSilicon.

Reasons for the Acquisition. In approving the merger agreement, management considered a number of factors, including (i) the complementary nature of inSilicon's portfolio of intellectual property blocks and Synopsys' own portfolio; (ii) the fact that inSilicon had established a per-use license model for its IP products, which was expected to accelerate Synopsys' adoption of a per-use model for its new and development-stage IP; (iii) inSilicon's relationships with chip design teams; (iv) inSilicon's positive reputation as a vendor of high-quality IP; and (v) inSilicon's highly-skilled employee base. The foregoing discussion of the information and factors considered by Synopsys' management is not intended to be exhaustive but includes the material factors considered.

Purchase Price. Holders of inSilicon common stock received \$4.05 in exchange for each share of inSilicon common stock owned as of the merger date, or approximately \$65.4 million. The total purchase consideration consisted of the following:

	<i>(in thousands)</i>
Cash paid for inSilicon common stock	\$65,386
Acquisition-related costs	6,221
Fair value of options to purchase Synopsys common stock issued, less \$1.7 million representing the portion of the intrinsic value of inSilicon's unvested options applicable to the remaining vesting period	2,975
	<u>\$74,582</u>

The acquisition-related costs of \$6.2 million consisted primarily of legal and accounting fees of \$1.8 million, other directly related charges including contract termination costs of \$3.3 million and restructuring costs of approximately \$0.8 million. As of October 31, 2003, substantially all of the acquisition related costs have been paid.

The following table summarizes the allocation of the purchase price for inSilicon and the estimated amortization period for the acquired intangibles:

	<i>(in thousands)</i>
Cash, cash equivalents and short-term investments	\$24,908
Accounts receivable	2,428
Prepaid expenses and other current assets	7,463
Identifiable intangible assets:	
Core/developed technology ⁽¹⁾	15,100
Customer backlog ⁽¹⁾	1,200
Goodwill	22,160
Other assets	1,480
Total assets acquired	<u>74,739</u>
Accounts payable and accrued liabilities	2,021
Deferred revenue	1,137
Income taxes payable	463
Other liabilities	1,736
Total liabilities assumed	<u>5,357</u>
Net assets acquired	69,382
In-process research and development	5,200
Purchase price	<u>\$74,582</u>

(1) Estimated useful life is 3 years.

Goodwill and Intangible Assets. Goodwill, representing the excess of the purchase consideration over the fair value of tangible and identifiable intangible assets acquired in the merger will not be amortized, consistent with the guidance in SFAS 142 (see Note 2). The goodwill associated with the inSilicon acquisition is not deductible for tax purposes.

The amortization of intangible assets is included in cost of revenue in the statement of operations for fiscal 2003 and 2002. inSilicon had executed signed contracts with five of its major customers to provide IP licenses, including significant modifications to the IP license in order to meet unique customer requirements. The value associated with these contracts was determined by quantifying the projected cash flow related to these contracts, discounted to present value, and is recorded as customer backlog in intangible assets in the consolidated balance sheets.

Unaudited Pro Forma Results of Operations. The following table presents pro forma results of operations and gives effect to the Avant! and inSilicon acquisitions as if the acquisitions were consummated at the beginning of fiscal 2002. The Company has not included the effect of its other fiscal 2002 acquisitions because the effects of these acquisitions were not material. The Company's results of operations may have been different than those shown below if the Company had actually acquired Avant! and inSilicon at the beginning of fiscal 2002. Pro forma results below do not necessarily indicate future operating results.

	<u>Year Ended October 31,</u>	
	<u>2002</u>	<u>2001</u>
	<i>(in thousands, except per share amounts)</i>	
Revenue ⁽¹⁾	\$1,186,916	\$1,100,249
Net income ⁽²⁾	\$ (186,415)	\$ (82,487)
Basic earnings per share	\$ (1.24)	\$ (0.55)
Weighted-average common shares outstanding	150,622	150,262
Diluted earnings per share	\$ (1.24)	\$ (0.55)
Weighted-average common shares and dilutive stock options outstanding	150,622	150,262

- (1) Fiscal 2002 pro forma results of operations for the period from November 1, 2002 to the date of acquisition include Avant! and inSilicon's reported revenue in the periods Avant! and inSilicon recognized such revenues. However, the purchase method of accounting requires Synopsys to reduce Avant! and inSilicon's reported deferred revenue to an amount equal to the fair value of the legal liability, resulting in lower revenue in periods following the merger than Avant! and inSilicon would have achieved as separate companies. Therefore, revenues from Avant! and inSilicon products for the period from the date of acquisition to October 31, 2002 included in the pro forma results of operations reflect the lower amortization of deferred revenue stemming from this purchase accounting adjustment.
- (2) Net income for fiscal 2002 includes non-recurring acquisition costs incurred by Synopsys of \$335.8 million for the Avant! insurance policy premium, \$82.5 million for IPRD resulting from the Avant! merger, \$5.2 million for IPRD resulting from the inSilicon merger. Net income for fiscal 2002 and 2001 also includes non-recurring costs incurred by Avant! of \$21.0 and \$268.1 million, respectively, for certain litigation settlement costs paid by Avant! prior to the merger.

Integration Costs. Non-recurring integration costs incurred relate to merger activities which are not included in the purchase consideration under Emerging Issues Task Force Number 95-3, *Recognition of Liabilities in Connection with a Purchase Business Combination*. These costs are expensed as incurred. During fiscal 2002, integration costs totaled \$128.5 million. These costs consisted primarily of (i) \$95.0 million related to the premium for the insurance policy acquired in conjunction with the Avant! merger, (ii) \$14.7 million related to write-downs of Synopsys facilities and property under the approved facility exit plan for the Avant! merger, (iii) \$10.0 million and \$0.7 million related to severance costs for Synopsys employees who were terminated and costs associated with transition employees as a result of the Avant! and inSilicon mergers, respectively, (iv) \$1.3 million related to the write-off of software licenses owned by Synopsys which were originally purchased from Avant!, (v) \$3.7 million goodwill impairment charge related to a prior Synopsys acquisition as a result of the acquisition of Avant!, and (vi) \$1.2 million and \$1.9 million of other expenses including travel and certain professional fees for the Avant! and Co-Design mergers, respectively.

Fiscal 2001 Divestitures

Artisan Components, Inc. On January 4, 2001, the Company sold the assets of its silicon libraries business to Artisan for a total sales price of \$15.5 million, including common stock with a fair value on the date of sale of \$11.4 million and cash of \$4.1 million. The net book value of the assets sold was \$1.4 million. Expenses incurred in connection with the sale were \$3.5 million. The Company recorded a gain on the sale of the business of \$10.6 million, which is included in other income, net in fiscal 2001. Direct revenue for the silicon libraries business was \$0.2 million in fiscal 2001.

Note 4. Goodwill and Other Intangible Assets, Net

Goodwill for the years ended October 31, 2002 and 2003 consisted of the following:

	<i>(in thousands)</i>
Balance at October 31, 2001	\$ 35,077
Additions	419,463
Amortization	(16,201)
Impairments	(3,693)
Other adjustments	(92)
Balance at October 31, 2002	434,554
Additions ⁽¹⁾	143,361
Amortization	—
Impairments	—
Other adjustments ⁽²⁾	(27,183)
Balance at October 31, 2003	<u>\$550,732</u>

- (1) Additions include goodwill and intangible assets acquired as part of the Numerical acquisition, assets acquired as part of other acquisitions made during the fiscal year, contract termination costs and amounts related to foreign currency fluctuations for goodwill which is not denominated in U.S. dollars.
- (2) Reversals primarily include \$31.6 million related to Avant! facilities discussed above under *Fiscal 2002 Acquisitions* above, offset by the reduction of \$4.3 million in Avant! unbilled receivables. These receivables relate to long-term library business service contracts under which Avant! had not yet performed services and, as such, represent executory contracts rather than unbilled receivables. The amount assigned to the associated intangible asset was not material.

Intangible assets as of October 31, 2002 consisted of the following:

	<u>Gross Assets</u>	<u>Accumulated Amortization</u>	<u>Net Assets</u>
		<i>(in thousands)</i>	
Contract rights intangible	\$ 51,700	\$ 7,181	\$ 44,519
Core/developed technology	215,462	28,696	186,766
Covenant not to compete	9,100	948	8,152
Customer backlog	3,300	33	3,267
Customer relationship	102,890	7,108	95,782
Trademark and tradename	17,700	2,458	15,242
Total intangible assets ⁽¹⁾	<u>\$400,152</u>	<u>\$46,424</u>	<u>\$353,728</u>

- (1) Total intangible assets do not include capitalized research and development, net of \$1.6 million as of October 31, 2002.

Intangible assets as of October 31, 2003 consisted of the following:

	<u>Gross Assets</u>	<u>Accumulated Amortization</u>	<u>Net Assets</u>
		<i>(in thousands)</i>	
Contract rights intangible	\$ 51,700	\$ 24,414	\$ 27,286
Core/developed technology	241,457	104,335	137,122
Covenant not to compete	9,554	3,330	6,224
Customer backlog	8,270	2,248	6,022
Customer relationship	123,570	26,857	96,713
Trademark and tradename	18,007	8,418	9,589
Total intangible assets ⁽¹⁾	<u>\$452,558</u>	<u>\$169,602</u>	<u>\$282,956</u>

(1) Total intangible assets do not include capitalized research and development, net of \$2.6 million as of October 31, 2003.

Total amortization expense related to other intangible assets is set forth in the table below:

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	<i>(in thousands)</i>		
Contract rights intangible	\$ 17,233	\$ 7,181	\$—
Core/developed technology	75,639	27,124	—
Covenant not to compete	2,382	948	—
Customer backlog	2,215	33	—
Customer relationship	19,749	7,118	—
Trademark and tradename	5,960	2,458	—
Total intangible assets ⁽¹⁾	<u>\$123,178</u>	<u>\$44,862</u>	<u>\$—</u>

(1) Total amortization of intangible assets does not include amortization of capitalized research and development of \$1.6 million, \$1.1 million and \$1.0 million in fiscal 2003, 2002 and 2001, respectively.

The following table presents the estimated future amortization of other intangible assets:

<u>Fiscal Year</u>	<i>(in thousands)</i>
2004	\$126,674
2005	90,814
2006	26,154
2007	21,698
2008	14,347
Thereafter	<u>3,269</u>
Total estimated future amortization of other intangible assets	<u>\$282,956</u>

The following table reflects adjusted net income (loss) per share, excluding amortization of goodwill, for fiscal 2002 and 2001 as if the Company had adopted SFAS 142 as of July 1, 2001. The Company's actual results of operations are shown for fiscal 2003.

	Year Ended October 31,		
	2003	2002	2001
	<i>(in thousands, except per share amounts)</i>		
Net income (loss)	\$149,724	\$(199,993)	\$ 56,802
Add: Amortization of goodwill	—	16,201	17,012
Adjusted net income (loss)	\$149,724	\$(183,792)	\$ 73,814
Basic earnings (loss) per share	\$ 0.99	\$ (1.38)	\$ 0.61
Weighted-average common shares outstanding	151,251	133,616	121,202
Diluted earnings (loss) per share	\$ 0.95	\$ (1.38)	\$ 0.57
Weighted-average common shares and dilutive stock options outstanding ...	158,326	133,616	129,318

Note 5. Financial Instruments

Cash, Cash Equivalents and Investments. All cash equivalents, short-term investments and non-current investments have been classified as available-for-sale securities and are detailed as follows:

	Cost	Net Unrealized Gains	Net Unrealized Losses	Estimated Fair Value
Balance at October 31, 2003	<i>(in thousands)</i>			
Classified as current assets:				
Cash	\$218,382	\$ —	\$ —	\$218,382
Money market funds	305,926	—	—	305,926
Tax-exempt municipal obligations	166,362	587	—	166,949
Municipal auction rate preferred stock	7,100	—	—	7,100
	697,770	587	—	698,357
Classified as non-current assets:				
Equity securities	8,938	—	(343)	8,595
Total	\$706,708	\$ 587	\$(343)	\$706,952
Balance at October 31, 2002				
Classified as current assets:				
Cash	\$129,044	\$ —	\$ —	\$129,044
Money market funds	183,536	—	—	183,536
Tax-exempt municipal obligations	101,904	249	—	102,153
Municipal auction rate preferred stock	—	—	—	—
	414,484	249	—	414,733
Classified as non-current assets:				
Equity securities	25,113	14,273	—	39,386
Total	\$439,597	\$14,522	\$ —	\$454,119

As of October 31, 2003, the stated maturities of the Company's current investments are \$36.6 million within one year, \$84.0 million within one to five years, \$13.8 million within five to ten years and \$39.6 million after ten years. These investments are generally classified as available-for-sale and 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. Realized gains and losses on sales of short-term investments have not been material.

Strategic Investments. The Company's strategic investment portfolio consists of minority equity investments in publicly traded companies and investments in privately held companies. The securities of publicly traded companies are generally classified as available-for-sale securities accounted for under Statement of Financial Accounting Standards No. 115 (SFAS 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 other comprehensive income in stockholders' equity. The cost basis of securities sold is based on the specific identification method. These securities of privately held companies are reported at the lower of cost or fair value.

During the years ended October 31, 2003, 2002 and 2001 the Company determined that certain strategic investments, with an aggregate value of \$7.1 million, \$16.3 million and \$9.4 million, respectively, were impaired and that the impairment was permanent. Accordingly, the Company recorded a charge of approximately \$4.5 million, \$11.3 million and \$5.8 million during fiscal 2003, 2002 and 2001, respectively, to write down the carrying value of the investments.

Derivative Financial Instruments. Available-for-sale equity investments accounted for under SFAS 115 are subject to market price risk. From time to time, the Company enters into and designates forward contracts to hedge variable cash flows from anticipated sales of these investments. In accounting for a derivative designated as a cash flow hedge, the effective portion of the change in fair value of the derivative is initially recorded in other comprehensive income and reclassified into earnings when the hedged anticipated transaction affects earnings. The ineffective portion of the change in the fair value of the derivative is recognized in earnings immediately.

The Company's objective for entering into derivative contracts is to lock in the price of selected equity holdings while maintaining the rights and benefits of ownership until the anticipated sale occurs. The forecasted sale selected for hedging is determined by market conditions, up-front costs and other relevant factors. The Company has generally selected forward sale contracts to hedge its market price risk.

Changes in the spot rate of the forward sale contracts designated and qualifying as cash flow hedges of the forecasted sale of available-for-sale investments accounted for under SFAS 115 are reported in other comprehensive income. The notional amount of the forward designated as the hedging instrument is equal to the available-for-sale securities being hedged. In addition, hedge effectiveness is assessed based on the changes in spot prices. As such, the hedging relationship is perfectly effective, both at inception of the hedge and on an on-going basis. The difference between the contract price and the forward price, which is generally not material, is reflected in other income.

The Company entered into forward sale contracts in fiscal 2001 and 2000 with a major financial institution for the sale of certain of the Company's strategic investments. During fiscal 2001, 2002 and 2003, the Company physically settled certain forward contracts. The net gain on the forward contracts was offset by the net loss on the related available-for-sale investment since inception of the hedge, with any gain or loss reclassified from other comprehensive income to other income. As of October 31, 2003, there are no forward contracts outstanding.

Debt. As of October 31, 2003, the Company's debt totaled \$7.2 million consisting primarily of \$5.1 million for notes payable related to acquisitions payable through 2007 and \$1.5 million to secure bonds related to certain property taxes. As of October 31, 2002, the Company's debt consisted of \$0.1 million for equipment leases, \$5.1 million for notes payable related to acquisitions and \$1.4 million to secure bonds related to certain property taxes.

Note 6. Commitments and Contingencies

The Company leases its domestic and foreign facilities and certain office equipment under operating leases. Rent expense was \$35.1 million, \$33.7 million and \$30.0 million in fiscal 2003, 2002 and 2001, respectively. In October 2003, the Company entered into a lease agreement for a portion of its office space by which it leases a building owned by it in Sunnyvale, California to a third party through February 2009. The Company will receive monthly sublease payments of \$150,000 beginning March 2004.

Future minimum lease payments on all facility operating leases, net of sublease income, as of October 31, 2003 are as follows:

Fiscal Year	Minimum Lease Payments ⁽¹⁾	Lease Income <i>(in thousands)</i>	Net
2004	\$ 38,470	\$1,200	\$ 37,270
2005	33,226	1,838	31,388
2006	31,662	1,896	29,766
2007	26,706	1,954	24,752
2008	21,732	2,011	19,721
Thereafter	<u>115,031</u>	<u>677</u>	<u>114,354</u>
Total minimum payments required	<u>\$266,827</u>	<u>\$9,576</u>	<u>\$257,251</u>

(1) Minimum lease payments exclude leases related to Avant! and Numerical facilities which the Company intends to terminate under its approved facilities exit plan as these payments are included in the acquisition-related costs for the Avant! and Numerical acquisitions (see Note 3).

Note 7. Stockholders' Equity

Stock Repurchase Programs. In July 2001, the Company's Board of Directors authorized a stock repurchase program under which Synopsys common stock with a market value up to \$500 million may be acquired in the open market. This stock repurchase program replaced all prior repurchase programs authorized by the Board. The Company intends to use all common shares repurchased for ongoing stock issuances such as existing employee stock option plans, existing stock purchase plans and acquisitions. The July 2001 stock repurchase program expired on October 31, 2002. In December 2002, the Company's Board of Directors renewed the stock repurchase program originally approved in July 2001 (see note 12). During fiscal 2003, 2002 and 2001, the Company purchased approximately 9.4 million shares at an average price of \$27.72 per share, approximately 7.8 million shares at an average price of \$22.10 per share, and approximately 13.2 million shares at an average price of \$25.00 per share, respectively.

Preferred Shares Rights Plan. The Company has adopted a number of provisions that could have anti-takeover effects, including a Preferred Shares Rights Plan. In addition, the Board of Directors has the authority, without further action by its shareholders, to fix the rights and preferences and issue shares of authorized but undesignated shares of Preferred Stock. This provision and other provisions of the Company's Restated Certificate of Incorporation and Bylaws and the Delaware General Corporation Law may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of the Company, including transactions in which the stockholders of the Company might otherwise receive a premium for their shares over then current market prices. The preferred share rights expire on October 24, 2007.

Employee Stock Purchase Plan. Under the Company's Employee Stock Purchase Plan and International Employee Stock Purchase Plan (collectively, the ESPP) an aggregate of 17,700,000 shares have been authorized for issuance as of October 31, 2003. Under the ESPP, employees are granted the right to purchase shares of common stock at a price per share that is 85% of the lesser of the fair market value of the shares at (i) the

beginning of a rolling two-year offering period or (ii) the end of each semi-annual purchase period. During fiscal 2003, 2002, and 2001 shares totaling 1,536,574, 1,255,882 and 1,134,508, respectively, were issued under the plan at average per share prices of \$17.35, \$16.93 and \$16.60, respectively. As of October 31, 2003, 7,833,992 shares of common stock were reserved for future issuance under the plan.

Stock Option Plans. Under the Company's 1992 Stock Option Plan (the 1992 Plan), 38,951,016 shares of common stock have been authorized for issuance. Pursuant to the 1992 Plan, the Board of Directors may grant either incentive or non-qualified stock options to purchase shares of common stock to eligible individuals at not less than 100% of the fair market value of those shares on the grant date. Stock options granted under the 1992 Plan generally vest over a period of four years and expire ten years from the date of grant. As of October 31, 2003, 9,003,784 stock options remain outstanding and 7,479,776 shares of common stock are reserved for future grants under this plan.

Under the Company's 1998 Non-Statutory Stock Option Plan (the 1998 Plan), 53,247,068 shares of common stock have been authorized for issuance. Pursuant to the 1998 Plan, the Board of Directors may grant non-qualified stock options to employees, excluding executive officers. Exercisability, option price and other terms are determined by the Board of Directors, but the option price shall not be less than 100% of the fair market value of those shares on the grant date. Stock options granted under the 1998 Plan generally vest over a period of four years and expire ten years from the date of grant. As of October 31, 2003, 28,161,720 stock options remain outstanding and 8,179,958 shares of common stock were reserved for future grants under this plan.

Under the Company's 1994 Non-Employee Directors Stock Option Plan (the Directors Plan), 1,800,000 shares have been authorized for issuance. The Directors Plan provides for automatic grants to each non-employee member of the Board of Directors upon initial appointment or election to the Board, upon reelection and for annual service on Board committees. The option price shall not be less than 100% of the fair market value of those shares on the grant date. Under the Directors Plan, as originally adopted, new directors receive an option for 40,000 shares, vesting in equal installments over four years. In addition, each continuing director who is elected at an annual meeting of stockholders receives an option for 20,000 shares and an additional option for 10,000 shares for each Board committee membership, up to a maximum of two committee service grants per year. In August 2003, the Board amended the Directors Plan to reduce the size of the initial and committee grants to 30,000 and 5,000 shares, respectively. The annual and committee service option grants vest in full on the date immediately prior to the date of the annual meeting following their grant. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants are prorated based upon the amount of time since the last annual meeting. As of October 31, 2003, 1,168,492 stock options remain outstanding and 110,346 shares of common stock were reserved for future grants under this plan.

The Company has assumed certain option plans in connection with business combinations. Generally, the options granted under these plans have terms similar to the Company's options. The exercise prices of such options have been adjusted to reflect the relative exchange ratios. The Company does not intend to make future grants out of these option plans.

Additional information concerning stock option activity under all plans is as follows:

	<u>Options Outstanding</u>	<u>Weighted- Average Exercise Price</u>
	<i>(in thousands)</i>	
Outstanding at October 31, 2000	49,490	\$18.70
Granted	11,934	\$24.12
Exercised	(5,210)	\$16.57
Canceled	<u>(4,374)</u>	\$19.90
Outstanding at October 31, 2001	51,840	\$20.05
Granted	8,162	\$23.94
Options assumed in acquisitions	5,022	\$18.58
Exercised	(5,702)	\$17.22
Canceled	<u>(3,362)</u>	\$21.47
Outstanding at October 31, 2002	55,960	\$20.70
Granted	4,518	\$25.06
Options assumed in acquisitions	2,115	\$24.74
Exercised	(16,573)	\$18.60
Canceled	<u>(3,901)</u>	\$24.02
Outstanding at October 31, 2003	<u>42,119</u>	\$21.89
Options exercisable at:		
October 31, 2001	20,810	\$19.12
October 31, 2002	30,460	\$20.25
October 31, 2003	25,924	\$21.65

The following table summarizes information about stock options outstanding as of October 31, 2003:

<u>Range of Exercise Prices</u>	<u>Options Outstanding</u>			<u>Exercisable Options</u>	
	<u>Number Outstanding</u>	<u>Weighted- Average Remaining Contractual Life (In Years)</u>	<u>Weighted- Average Exercise Price</u>	<u>Number Exercisable</u>	<u>Weighted- Average Exercise Price</u>
	<i>(in thousands)</i>			<i>(in thousands)</i>	
\$0.001 — \$14.09	2,104	5.40	\$ 9.82	1,450	\$ 10.25
\$14.24 — \$16.13	6,468	6.67	\$ 15.98	4,147	\$ 15.98
\$16.19 — \$18.72	5,401	6.34	\$ 18.05	3,684	\$ 18.00
\$18.78 — \$20.00	4,797	6.48	\$ 19.61	3,572	\$ 19.55
\$20.01 — \$22.03	4,819	7.59	\$ 21.34	2,408	\$ 21.30
\$22.06 — \$24.80	5,506	7.32	\$ 23.57	2,919	\$ 23.57
\$24.92 — \$27.20	5,110	7.94	\$ 25.87	2,543	\$ 25.96
\$27.40 — \$30.00	4,634	6.87	\$ 28.93	3,346	\$ 28.89
\$30.03 — \$97.92	3,277	7.98	\$ 32.67	1,852	\$ 32.87
\$130.44 — \$130.44	<u>3</u>	6.61	\$130.44	<u>3</u>	\$130.44
\$0.001 — \$130.44	<u>42,119</u>	7.01	\$ 21.89	<u>25,924</u>	\$ 21.65

Note 8. Income Taxes

The Company is entitled to a deduction for federal and state tax purposes with respect to employees' stock option activity. The net reduction in taxes otherwise payable arising from that deduction has been credited to additional paid-in capital.

The components of the Company's total income (loss) before provision for income taxes are as follows:

	Year Ended October 31,		
	2003	2002	2001
	<i>(in thousands)</i>		
United States	\$ 35,651	\$(309,072)	\$93,187
Foreign	183,338	20,132	(9,654)
	<u>\$218,989</u>	<u>\$(288,940)</u>	<u>\$83,533</u>

The components of the provision (benefit) for income taxes are as follows:

	Year Ended October 31,		
	2003	2002	2001
	<i>(in thousands)</i>		
Current:			
Federal	\$(13,355)	\$ 9,605	\$ 80,783
State	117	(1,319)	7,758
Foreign	47,978	11,474	6,782
	<u>34,740</u>	<u>19,760</u>	<u>95,323</u>
Deferred:			
Federal	(9,228)	(104,041)	(66,049)
State	(1,312)	(21,728)	(13,076)
Foreign	(19,963)	(2,398)	(5,460)
	<u>(30,503)</u>	<u>(128,167)</u>	<u>(84,585)</u>
Charge equivalent to the federal and state tax benefit related to employee stock options	65,028	19,460	15,993
Provision (benefit) for income taxes	<u>\$ 69,265</u>	<u>\$(88,947)</u>	<u>\$ 26,731</u>

The provision (benefit) for income taxes differs from the amount obtained by applying the statutory federal income tax rate to income (loss) before income taxes as follows:

	Year Ended October 31,		
	2003	2002	2001
	<i>(in thousands)</i>		
Statutory federal tax	\$ 76,646	\$(101,129)	\$29,236
State tax, net of federal effect	6,909	(8,105)	2,611
Tax credits	(4,020)	(10,745)	(9,041)
Tax benefit from foreign sales corporation/extraterritorial income exclusion	—	(2,827)	(2,780)
Tax exempt income	(1,265)	(1,865)	(3,289)
Foreign tax (less than) in excess of U.S. statutory tax	(16,479)	1,553	2,679
Non-deductible merger and acquisition expenses	—	4,367	5,601
In-process research and development expenses	6,948	30,695	—
Other	526	(891)	1,714
	<u>\$ 69,265</u>	<u>\$(88,947)</u>	<u>\$26,731</u>

Net deferred tax assets of \$241.0 million and \$276.3 million were recorded as of October 31, 2003 and 2002, respectively. The net deferred tax asset of \$241.0 million for fiscal 2003 includes the tax effects of the parent corporation, the Company, and newly acquired corporations, Numerical and InnoLogic Systems, Inc. The

tax effects of temporary differences and carryforwards which give rise to significant portions of the deferred tax assets and liabilities are as follows:

	<u>October 31,</u>	
	<u>2003</u>	<u>2002</u>
	<i>(in thousands)</i>	
Net deferred tax assets:		
Deferred tax assets:		
Current:		
Net operating loss and tax credit carryovers	\$ 82,973	\$ 7,370
Deferred revenue	113,906	111,463
Reserves and other expenses not currently deductible	51,427	62,414
Insurance premiums	—	94,213
Other	267	10,491
	<u>248,573</u>	<u>285,951</u>
Non-current:		
Net operating loss and tax credit carryovers	63,940	52,529
Deferred compensation	8,853	9,247
Depreciation and amortization	9,193	32,335
Other	—	2,148
	<u>81,986</u>	<u>96,259</u>
Total deferred tax assets	<u>330,559</u>	<u>382,210</u>
Deferred tax liabilities:		
Current:		
Unrealized foreign exchange losses	148	3,084
Non-current:		
Unrealized gain on securities investments	96	5,256
Net capitalized software development costs	1,030	1,185
Intangible assets	86,114	96,358
Other	2,177	—
	<u>89,417</u>	<u>102,799</u>
Total deferred tax liabilities	<u>89,565</u>	<u>105,883</u>
Net deferred tax assets	<u>\$240,994</u>	<u>\$276,327</u>

As of October 31, 2003, the Company believes that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the deferred tax assets.

The Company's U.S. income tax return for fiscal 2001 is under examination. Management believes that adequate amounts have been provided for any adjustments that may ultimately result from this examination.

The Company has federal tax loss carryforwards of approximately \$230.5 million as of October 31, 2003 which includes a federal loss carryforward of approximately \$75.4 million resulting from tax deductions in 2003 related to employee stock options. The loss carryforwards will expire in 2010 through 2023. Because of the change in ownership provisions of the Internal Revenue Code, a portion of the Company's loss carryforwards may be subject to annual limitations. The annual limitation may result in the expiration of the net operating loss before utilization. Management believes that all net operating losses will be utilized, and a valuation allowance is not necessary. The tax benefit of federal net operating losses attributable to employee stock options is credited directly to stockholder's equity.

The Company has federal foreign tax credits of \$33.1 million. If not utilized, \$28.2 million of the foreign tax credit carryforwards will expire in 2008, and \$4.9 million of the foreign tax credit carryforwards will begin to

expire in 2005. The Company has federal and California research and development credits of \$14.6 million and \$17.5 million, respectively. If not utilized, the federal research and development credits will begin to expire in 2022. The Company has other state tax credits of \$2.8 million that, if not utilized, will begin to expire in 2006.

The Company provides for U.S. income taxes on the earnings of its foreign subsidiaries unless they are considered permanently invested outside of the U.S. As of October 31, 2003, the cumulative amount of earnings upon which U.S. income taxes have not been provided is approximately \$176.7 million. As of October 31, 2003, the unrecognized deferred tax liability for these earnings was approximately \$49.1 million.

Note 9. Segment Disclosure

Statement of Financial Accounting Standards No. 131 (SFAS 131), *Disclosures about Segments of an Enterprise and Related Information*, requires disclosures of certain information regarding operating segments, products and services, geographic areas of operation and major customers. SFAS 131 reporting is based upon the “management approach”: how management organizes the Company’s operating segments for which separate financial information (i) is available and (ii) is evaluated regularly by the Chief Operating Decision Maker (CODM) in deciding how to allocate resources and in assessing performance. Synopsys’ CODMs are the Company’s Chief Executive Officer and Chief Operating Officer.

The Company provides software products and consulting services in the electronic design automation software industry. In making operating decisions, the CODMs primarily consider consolidated financial information, accompanied by disaggregated information about revenues by geographic region. The Company operates in a single segment. Revenue is defined as revenues from external customers.

Revenue and long-lived assets related to operations in the United States and other geographic areas were:

	<u>Year Ended October 31,</u>		
	<u>2003</u>	<u>2002</u>	<u>2001</u>
	<i>(in thousands)</i>		
Revenue:			
United States	\$ 668,771	\$591,526	\$426,527
Europe	184,116	145,758	125,380
Japan	217,111	95,413	69,850
Other	106,985	73,837	58,593
Consolidated	<u>\$1,176,983</u>	<u>\$906,534</u>	<u>\$680,350</u>
		<u>October 31,</u>	
		<u>2003</u>	<u>2002</u>
		<i>(in thousands)</i>	
Long-lived assets:			
United States	\$160,588	\$162,360	
Other	23,725	22,680	
Consolidated	<u>\$184,313</u>	<u>\$185,040</u>	

Geographic revenue data for multi-region, multi-product transactions reflect internal allocations and is therefore subject to certain assumptions and to the Company’s methodology. Beginning in fiscal 2003, geographic revenue reflects reconfiguration of licenses between different regions following the initial product shipment.

For management reporting purposes, we organize our products and services into five distinct groups: Galaxy Design Platform, Discovery Verification Platform, Intellectual Property (IP), New Ventures and Professional Services & Other. The following table summarizes the revenue attributable to these groups as a percentage of

total revenue for the last twelve quarters. 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, which represented approximately 18% of our total revenue and approximately 84% of our total services revenue for fiscal 2003, to the products to which those support services relate. Further, with the adoption of our platform strategy in fiscal 2003, we redefined our product groups and have reclassified prior period revenues in accordance with this new grouping to provide a consistent presentation.

	Year Ended October 31,		
	2003	2002	2001
	<i>(in thousands)</i>		
Revenue:			
Galaxy Design Platform	\$ 765,688	\$580,808	\$381,250
Discovery Verification Platform	245,914	189,317	151,321
IP	74,096	59,976	64,163
New Ventures	52,093	17,681	—
Professional Services & Other	39,192	58,752	83,616
Consolidated	<u>\$1,176,983</u>	<u>\$906,534</u>	<u>\$680,350</u>

Beginning in fiscal 2003, product revenue reflects reconfiguration of licenses between different product categories following the initial product shipment.

No one customer accounted for more than ten percent of the Company's consolidated revenue in the periods presented.

Note 10. Termination of Agreement to Acquire IKOS Systems, Inc.

On July 2, 2001, the Company entered into an Agreement and Plan of Merger and Reorganization (the IKOS Merger Agreement) with IKOS Systems, Inc. (IKOS). The IKOS Merger Agreement provided for the acquisition of all outstanding shares of IKOS common stock by Synopsys.

On December 7, 2001, Mentor Graphics Corporation (Mentor) commenced a cash tender offer to acquire all of the outstanding shares of IKOS common stock at \$11.00 per share, subject to certain conditions. On March 12, 2002, Synopsys and IKOS executed a termination agreement by which the parties terminated the IKOS Merger Agreement and pursuant to which IKOS paid Synopsys the \$5.5 million termination fee required by the IKOS Merger Agreement. This termination fee and \$2.4 million of expenses incurred in conjunction with the acquisition are included in other income, net on the consolidated statement of operations for the year ended October 31, 2002. Synopsys subsequently executed a revised termination agreement with Mentor and IKOS in order to add Mentor as a party thereto.

Note 11. Related Party Transactions

Revenues derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 9.5% and 7.9% of fiscal 2003 and 2002 revenues, respectively. Andy D. Bryant, Intel Corporation's Executive Vice President and Chief Financial and Enterprise Services Officer, also serves on the Company's Board of Directors. Management believes the transactions between the two parties were carried out on an arm's length basis.

The Company has a joint venture with Davan Tech Co., Ltd, of Korea (Davan Tech) whereby Davan Tech acts as a non-exclusive distributor for the Company subject to certain conditions as defined in the distribution agreement. As of October 31, 2003, the Company owned approximately 10% of Davan Tech, and the investment is accounted for under the cost basis. During fiscal 2003 and the period from June 6, 2002 through October 31, 2002, the Company recognized revenues totaling \$3.9 million and \$1.3 million, respectively, from Davan Tech. Accounts receivable included \$0.9 million and \$3.7 million of receivable from Davan Tech as of October 31,

2003 and 2002, respectively. In December 2003, the Company terminated its distribution agreement with Davan Tech.

The Company maintains a System-on-a-Chip Venture Fund (the Fund) authorized by the Company's Board which invests in companies that will facilitate building SoCs. The fund is administered by an investment advisory board consisting of senior Company officers, including the Company's Chief Executive Officer and Chief Operating Officer, and Dr. A. Richard Newton, a member of the Board. The Fund has invested \$800,000 in a private company that develops SoC test systems. The Chairman of the Company's Audit Committee, Deborah A. Coleman, is also the Chairman of the Board for such company. Ms. Coleman did not participate in Fund's investment decision.

During fiscal 2003 and 2002, Dr. A. Richard Newton, a member of Synopsys' Board of Directors, provided consulting services to Synopsys and was paid \$180,000. Under Synopsys' agreement with Dr. Newton, Dr. Newton provides advice, at Synopsys' request, concerning long-term technology strategy and industry development issues as well as assistance in identifying opportunities for partnerships with academia.

Note 12. Subsequent Event

In December 2003, the Board renewed the Company's stock repurchase program and replenished the amount available for purchases up to \$500 million, not including purchases made to date under the program.

Note 13. Selected Quarterly Data (Unaudited)

	Quarter Ended			
	January 31,	April 30,	July 31,	October 31,
	<i>(in thousands, except per share data)</i>			
2003:				
Revenue	\$268,136	\$292,028	\$ 300,366	\$ 316,453
Gross margin	208,783	232,652	242,208	253,023
Income before income taxes	48,946	38,926	68,026	63,091
Net income	34,385	22,289	48,475	44,575
Earnings per share				
Basic	\$ 0.23	\$ 0.15	\$ 0.32	\$ 0.29
Diluted	\$ 0.22	\$ 0.15	\$ 0.30	\$ 0.27
Market stock price range ⁽¹⁾ :				
High	\$ 26.43	\$ 25.00	\$ 32.96	\$ 34.47
Low	\$ 19.24	\$ 18.25	\$ 25.00	\$ 27.07
2002:				
Revenue	\$175,545	\$185,638	\$ 236,095	\$ 309,256
Gross margin	140,355	151,246	188,409	253,365
Income (loss) before income taxes	20,179	30,716	(161,380)	(178,455)
Net income (loss)	14,052	21,380	(137,589)	(97,836)
Earnings (loss) per share				
Basic	\$ 0.12	\$ 0.17	\$ (0.97)	\$ (0.65)
Diluted	\$ 0.11	\$ 0.16	\$ (0.97)	\$ (0.65)
Market stock price range ⁽¹⁾ :				
High	\$ 29.85	\$ 27.61	\$ 27.65	\$ 23.63
Low	\$ 24.73	\$ 20.86	\$ 20.12	\$ 16.32

(1) The Company's common stock is traded on the Nasdaq National Market under the symbol "SNPS." The stock prices shown represent quotations among dealers without adjustments for retail markups, markdowns or commissions and may not represent actual transactions. As of October 31, 2003, there were approximately 588 shareholders of record. To date, the Company has paid no cash dividends on its capital stock and has no current intention to do so.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

- (a) Evaluation of Disclosure Controls and Procedures. As of October 31, 2003 (the Evaluation Date), Synopsys carried out an evaluation under the supervision and with the participation of the Company's management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of Synopsys' disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)). There are inherent limitations to the effectiveness of any system of disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable, not absolute, assurance of achieving their control objectives. Subject to these limitations, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the Evaluation Date, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports the Company files and submits under the Exchange Act is recorded, processed, summarized and reported as and when required.
- (b) Changes in Internal Controls. There were no changes in Synopsys' internal controls over financial reporting during the fiscal quarter ended October 31, 2003 that have materially affected, or are reasonably likely to materially affect, Synopsys' internal control over financial reporting.

PART III

Item 10. *Directors and Executive Officers of the Registrant*

Directors and Executive Officers

Set forth below are the persons who serve as members of the Board of Directors of Synopsys and information regarding the directors, including information furnished by them as to principal occupations, certain other directorships held by them, any arrangements pursuant to which they were selected as directors or nominees and their ages as of December 31, 2003.

<u>Name</u>	<u>Age</u>	<u>Year First Elected Director</u>
Aart J. de Geus	49	1986
Andy D. Bryant	53	1999
Chi-Foon Chan	54	1998
Bruce R. Chizen	48	2001
Deborah A. Coleman	50	1995
A. Richard Newton	52	1987; 1995
Sasson Somekh	57	1999
Roy Vallee	51	2003
Steven C. Walske	51	1991

Background of Directors

Dr. Aart J. de Geus co-founded Synopsys and currently serves as Chief Executive Officer and Chairman of the Board of Directors. 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.

Andy D. Bryant has been a Director of Synopsys since January 1999 and currently serves as Executive Vice President and Chief Financial and Enterprise Services Officer of Intel Corporation, with responsibility for financial operations, human resources, information technology and e-business functions and activities worldwide. Mr. Bryant joined Intel in 1981 as Controller for the Commercial Memory Systems Operation and in 1983 became Systems Group Controller. In 1987 he was promoted to Director of Finance for the corporation and was appointed Vice President and Director of Finance of the Intel Products Group in 1990. Mr. Bryant became Chief Financial Officer in February 1994 and was promoted to Senior Vice President in January 1999. Mr. Bryant was appointed Chief Financial and Enterprise Services Officer in December 1999 and was promoted to Executive Vice President in January 2001. Prior to joining Intel, he held positions in finance at Ford Motor Company and Chrysler Corporation. Mr. Bryant holds a B.A. in economics from the University of Missouri and an M.B.A. in finance from the University of Kansas. He is a director of Kryptig Corp, a secure-messaging provider of medical information flows.

Dr. Chi-Foon Chan joined Synopsys as Vice President of Application Engineering & Services in May 1990. Since April 1997 he has served as Chief Operating Officer and since February 1998 he has held the additional title of President. Dr. Chan also became a Director of Synopsys in 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 and from October 1996 until April 1997 as Acting

Senior Vice President, Design Re-Use Group. Additionally, he has held the titles of Vice President, Engineering and General Manager, DesignWare Operations and Senior Vice President, Worldwide Field Organization. From March 1987 to May 1990, Dr. Chan was employed by NEC Electronics, where his last position was General Manager, Microprocessor Division. From 1977 to 1987, Dr. Chan held a number of senior engineering positions at Intel Corporation. Dr. Chan holds an M.S. and a Ph.D. in computer engineering from Case Western Reserve University.

Bruce R. Chizen has been a Director of Synopsys since April 2001. Mr. Chizen has served as President of Adobe Systems Incorporated, a provider of graphic design, publishing, and imaging software for Web and print production, since April 2000 and as Chief Executive Officer since December 2000. He joined Adobe Systems in August 1994 as Vice President and General Manager, Consumer Products Division and in December 1997 became Senior Vice President and General Manager, Graphics Products Division. In August 1998, Mr. Chizen was promoted to Executive Vice President, Products and Marketing. From November 1992 to February 1994 he was Vice President and General Manager, Claris Clear Choice for Claris Corp., a wholly-owned subsidiary of Apple Computer. He is a director of Adobe Systems.

Deborah A. Coleman has been a Director of Synopsys since November 1995. Ms. Coleman is co-founder and currently General Partner of SmartForest Ventures in Portland, Oregon. Ms. Coleman was Chairman of the Board of Merix Corporation, a manufacturer of printed circuit boards, from May 1994, when it was spun off from Tektronix, Inc., until September 2001. She also served as Chief Executive Officer of Merix from May 1994 to September 1999 and as President from March 1997 to September 1999. Ms. Coleman joined Merix from Tektronix, a diversified electronics corporation, where she served as Vice President of Materials Operations, responsible for worldwide procurement, distribution, component engineering and component manufacturing operations. Prior to joining Tektronix in November 1992, Ms. Coleman was with Apple Computer, Inc. for eleven years, where she held several executive positions, including Chief Financial Officer, Chief Information Officer and Vice President of Operations. She holds an M.B.A. from Stanford University. Ms. Coleman is a director of Applied Materials, Inc., a manufacturer of semiconductor fabrication equipment, Chairman of the Board of Teseda Corporation, a semiconductor test equipment company, and a director of Kryptig Corp., a secure-messaging provider of medical information flows.

Dr. A. Richard Newton has been a Director of Synopsys since January 1995. Previously, Dr. Newton was a Director of Synopsys from January 1987 to June 1991. Dr. Newton has been a Professor of Electrical Engineering and Computer Sciences at the University of California at Berkeley since 1979 and is currently Dean of the College of Engineering. From July 1999 to June 2000, Dr. Newton was Chair of the Electrical Engineering and Computer Sciences Department. Since 1988 Dr. Newton has acted as a Venture Partner with Mayfield Fund, a venture capital partnership, and has contributed to the evaluation and development of over two dozen new companies. From November 1994 to July 1995 he was acting President and Chief Executive Officer of Silicon Light Machines, a private company that has developed display systems based on the application of micromachined silicon light-valves.

Dr. Sasson Somekh has been a Director of Synopsys since January 1999. Dr. Somekh joined Novellus Systems, Inc., a manufacturer of semiconductor fabrication equipment, as President in January 2004. Previously, Dr. Somekh served as a member of the Board of Directors of Applied Materials, Inc., also a manufacturer of semiconductor fabrication equipment, from April 2003 until December 2003, and as an Executive Vice President of Applied from November 2000 until August 2003. Dr. Somekh served as a Senior Vice President of Applied from December 1993 to November 2000 and as a Group Vice President from 1990 to 1993. Dr. Somekh is a board member of Nanosys, Inc., a privately-held developer of nano-enabled systems for use in energy, defense, electronics, healthcare and information technology applications.

Roy Vallee has been a Director of Synopsys since February 2003. Mr. Vallee is Chief Executive Officer and Chairman of the Board of Avnet, Inc., a global semiconductor products and electronics distributor, positions he has held since June 1998. Previously, he was Vice Chairman of the Board since November 1992, and also

President and Chief Operating Officer since March 1992. Mr. Vallee currently serves on the Board of Directors of Teradyne, Inc., an automated testing company for the electronics, communications and software industries. He is also Chairman of the Executive Committee of the Global Technology Distribution Council.

Steven C. Walske has been a Director of Synopsys since December 1991. Mr. Walske has been Chief Business Strategist of Parametric Technology Corporation, a supplier of software products for mechanical computer aided engineering since June 2000. Previously, Mr. Walske served as Chairman, Chief Executive Officer and a Director from August 1994 until June 2000 and as President and Chief Executive Officer of that company from December 1986 to August 1994.

There are no family relationships among any executive officers, directors or persons chosen or nominated to become executive officers or directors of Synopsys.

Information with respect to executive officers of Registrant is included under Part I, Item 4. *Submission of Matters to a Vote of Security Holders—Executive Officers of the Registrant.*

Identification of Audit Committee and Financial Expert

Synopsys maintains an Audit Committee consisting of directors Ms. Coleman, Dr. Somekh and Mr. Vallee. All of such members satisfy the independence criteria of the National Association of Securities Dealers, Inc. for serving on an audit committee. SEC regulations require Synopsys to disclose whether a director qualifying as a “financial expert” serves on the Synopsys’ Audit Committee. Synopsys has determined that Ms. Coleman, Chairperson of the Audit Committee, qualifies as a “financial expert” within the meaning of such regulations.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, executive officers and greater than ten percent beneficial owners of our stock to file reports of ownership and changes in ownership with the SEC. Directors, executive officers and greater than ten percent stockholders are required by SEC regulations to furnish Synopsys with copies of all Section 16(a) reports they file.

Based solely on its review of the copies of the Forms 3, 4 and 5 filed by or received from its reporting persons (or written representations received from such persons), Synopsys believes that each of its directors, executive officers and greater than ten percent beneficial owners of its stock during fiscal 2003 complied with all filing requirements applicable to such persons except that Sanjiv Kaul, Senior Vice President, New Ventures Group, filed a Form 4 late reporting one transaction as a result of the transition from paper to electronic filing requirements.

Adoption of Code of Ethics

Synopsys has adopted a Code of Ethics and Business Conduct (the Code) applicable to all of its Board members, employees and executive officers, including its Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial Officer) and Vice President, Controller and Treasurer (Principal Accounting Officer). Synopsys has made the Code available on its website at www.synopsys.com/corporate/governance.

Synopsys intends to satisfy the disclosure requirement under Item 10 of Form 8-K regarding (i) any amendments to the Code, or (ii) any waivers under the Code relating to Synopsys’ Chief Executive Officer, Chief Financial Officer, by posting such information on its website at www.synopsys.com/corporate/governance.

Item 11. Executive Compensation

Named Executive Officer Compensation

The following table sets forth the compensation earned during fiscal 2003 by (1) Synopsys' Chief Executive Officer and (2) each of the other four most highly compensated executive officers whose compensation earned during fiscal 2003 exceeded \$100,000 for services rendered in all capacities to Synopsys during the last three fiscal years. We collectively refer to these individuals as the named executive officers.

Summary Compensation Table

Name and Position	Year	Annual Compensation (\$)		Long-Term Compensation: Securities Awards Underlying Options (#)	All Other Compensation (\$) ⁽¹⁾
		Salary	Bonus		
Aart J. de Geus Chief Executive Officer and Chairman of the Board	2003	400,000	605,000	104,600	2,362
	2002	400,000	535,000	106,500	1,500
	2001	400,000	575,000	85,500	1,830
Chi-Foon Chan President and Chief Operating Officer	2003	400,000	605,000	100,850	3,128
	2002	400,000	535,000	91,700	5,138
	2001	400,000	575,000	71,000	2,588
Vicki L. Andrews Senior Vice President, Worldwide Sales	2003	300,000	534,496	61,150	9,579
	2002	300,000	364,045 ⁽²⁾	72,900	13,884
	2001	289,423	611,396 ⁽³⁾	60,500	9,544
John Chilton ⁽⁴⁾ Senior Vice President and General Manager, Solutions Group	2003	320,000	295,000	34,800	2,437
Antun Domic ⁽⁴⁾ Senior Vice President and General Manager, Implementation Group	2003	330,000	320,000	48,350	2,981

(1) Amounts in this column reflect premiums paid for group term life insurance, Synopsys 401(k) contributions and, in the case of Ms. Andrews only, car allowances. Dr. Chan's 2002 amounts include special travel allowance.

(2) Represents bonus and commissions earned during fiscal year.

(3) Amount comprised of bonus and commissions of \$451,396 and a relocation bonus of \$160,000.

(4) Information for Mr. Chilton and Dr. Domic is presented only for fiscal 2003 as such persons were appointed executive officers during fiscal 2003.

Information regarding stock option grants to and exercises by the named executive officers is included under Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations—Stock Option Plans.*

Director Compensation

Each member of the Board receives a retainer of \$25,000 per year for attendance at Board meetings. Each member of the Audit Committee also receives \$2,000 per Audit Committee meeting attended, other than the Chairperson, who receives \$4,000 per Audit Committee meeting attended, in each case up to a maximum of four meetings per year.

Under our 1994 Non-Employee Directors Stock Option Plan (the Directors Plan), 1,800,000 shares have been authorized for issuance. The Directors Plan provides for automatic grants to each non-employee member of the Board of Directors upon initial appointment or election to the Board, upon reelection and for annual service on Board committees. The option price is 100% of the fair market value of those shares on the grant date. Under the Directors Plan, as originally adopted, new directors received an option for 40,000 shares, vesting in equal installments over four years. In addition, each continuing director who was reelected at an annual meeting of stockholders received an option for 20,000 shares and an additional option for 10,000 shares for each Board committee membership, up to a maximum of two committee service grants per year. In August 2003, the Board amended the Directors Plan to reduce the size of the initial and committee grants to 30,000 and 5,000 shares, respectively. The annual and committee service option grants vest in full on the date immediately prior to the date of the annual meeting following their grant. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants are prorated based upon the amount of time since the last annual meeting.

During fiscal 2003, Ms. Coleman, Drs. Newton and Somekh and Messrs. Bryant, Chizen, Walske and Vallee each received automatic grants of options to purchase 20,000 Synopsys common shares at an exercise price of \$30.94 per share for Synopsys Board of Directors service during the year, and two grants of options to purchase 10,000 shares each at an exercise price of \$30.94 per share for Synopsys Board of Directors Committee service during the year. Mr. Vallee, who joined the Board in February 2003, also received an option for 40,000 shares at an exercise price of \$20.46 for his initial service, a pro-rated annual grant of 6,666 shares at an exercise price of \$20.46 per share, and two pro-rated committee grants for an aggregate of 6,666 shares at an exercise price of \$20.23 per share.

Change of Control Agreements and Named Executive Officer Employment Contracts

Under the 1992 Stock Option Plan (1992 Plan), in the event of certain changes in the ownership or control of Synopsys involving a “Corporate Transaction,” which includes an acquisition of Synopsys by merger or asset sale, each outstanding option under the 1992 Plan will automatically become exercisable, unless the option is assumed by the successor corporation, or parent thereof, or replaced by a comparable option to purchase shares of the capital stock of the successor corporation or parent thereof.

In addition, in the event of a successful hostile tender offer for more than 50% of the outstanding Synopsys common shares or a change in the majority of the Board of Directors as a result of one or more contested elections for membership on the Board of Directors, the administrator of the 1992 Plan has the authority to accelerate vesting of outstanding options or shares purchased under the 1992 Plan.

The Directors Plan provides that in the event of a change of control or corporate transaction, as such terms are defined in the Directors Plan, all outstanding Directors Plan options shall become fully vested and exercisable as of the date of such change of control or corporate transaction.

Synopsys has entered into Employment Agreements, effective October 1, 1997, with its Chairman and Chief Executive Officer and its President and Chief Operating Officer. Each Employment Agreement provides that if the executive is terminated involuntarily other than for cause within 24 months of a change of control, (a) the executive will be paid an amount equal to two times the sum of the executive’s annual base pay plus target cash incentive, plus the cash value of the executive’s health benefits for the next 18 months, and (b) all stock options held by the executive will immediately vest in full. If the executive is terminated involuntarily other than for cause in any other situation, the executive will receive a cash payment equal to the sum of the executive’s annual base pay for one year plus the target cash incentive for such year plus the cash value of the executive’s health benefits for 12 months. The terms “involuntary termination,” “cause” and “change of control” are defined in the Employment Agreements, each of which is filed with the SEC.

Committee Interlocks and Insider Participation

The members of the Compensation Committee during fiscal 2003 were, Ms. Coleman and Messrs. Bryant, Chizen and Walske. Effective December 2003, the Compensation Committee consists of Ms. Coleman and Messrs. Chizen and Walske, all of whom satisfy the independence criteria of the National Association of Securities Dealers, Inc. for serving on a compensation committee.

No Compensation Committee member was at any time during fiscal 2003, or at any other time, an officer or employee of Synopsys or any of its subsidiaries.

No executive officer of Synopsys serves on the board of directors or compensation committee of any entity that has one or more executive officers serving on Synopsys' Board of Directors or Compensation Committee.

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

Ownership of the Company's Securities

The following table sets forth certain information with respect to the beneficial ownership of Synopsys' common stock as of December 31, 2003 by (1) each person known by Synopsys to beneficially own more than five percent of Synopsys' common stock outstanding on that date, (2) each Synopsys director, (3) each of the named executive officers and (4) all of Synopsys' directors and executive officers as a group.

<u>Name of Beneficial Owner⁽¹⁾</u>	<u>Shares of Common Stock Beneficially Owned</u>	
	<u>Number</u>	<u>Percentage Ownership</u>
J. & W. Seligman & Co. Incorporated 100 Park Avenue, 8th Floor New York, NY 10017	14,016,496 ⁽²⁾	8.52%
FMR Corp. 82 Devonshire Street Boston, MA 02109	9,571,040 ⁽³⁾	5.82%
Vicki L. Andrews	200,986 ⁽⁴⁾	*
Andy D. Bryant	199,498 ⁽⁵⁾	*
Chi-Foon Chan	1,857,069 ⁽⁶⁾	1.13%
John Chilton	183,305 ⁽⁷⁾	*
Bruce R. Chizen	158,332 ⁽⁸⁾	*
Deborah A. Coleman	121,400 ⁽⁹⁾	*
Aart J. de Geus	3,625,776 ⁽¹⁰⁾	2.20%
Antun Domic	208,451 ⁽¹¹⁾	*
A. Richard Newton	173,832 ⁽¹²⁾	*
Sasson Somekh	266,666 ⁽¹³⁾	*
Roy Vallee	93,332 ⁽¹⁴⁾	*
Steven C. Walske	206,032 ⁽¹⁵⁾	*
All directors and executive officers as a group (19 persons)	8,813,628 ⁽¹⁶⁾	5.36%

* Less than 1%

- (1) The persons named in the table above have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to community property laws where applicable and the information contained in the footnotes of this table.
- (2) Share ownership for J. & W. Seligman & Co. Incorporated (JWS) was obtained from Amendment No. 12 to the Schedule 13G filed with the Securities and Exchange Commission on July 10, 2003. JWS is the investment adviser for Seligman Communications and Information Fund, Inc. (the Fund), the owner of the shares, and has shared voting and investment power with respect to the shares reported as being beneficially owned. William C. Morris is the owner of a majority of the outstanding voting securities of JWS, and may be deemed to beneficially own the shares reported herein as beneficially owned by JWS. The Fund has shared voting and investment power with respect to 11,400,000 of the shares reported as being beneficially owned by JWS.

- (3) Share ownership for FMR Corp. was obtained from Amendment No. 2 to the Schedule 13G filed with the Securities and Exchange Commission on February 14, 2003. Fidelity Management & Research Company (Fidelity), a wholly-owned subsidiary of FMR Corp. and a registered investment advisor, may be deemed to be the beneficial owner of such shares as a result of acting as an investment adviser to various investment companies registered under the Investment Company Act of 1940 (the Fidelity Funds). Edward C. Johnson III and Abigail P. Johnson, as substantial stockholders and directors of FMR Corp., and FMR Corp., through its control of Fidelity, and the Fidelity Funds each has beneficial ownership of the shares held by the Funds. Edward C. Johnson III, FMR Corp., through its control of Fidelity, and the Fidelity Funds each has sole power to dispose of the 9,216,138 shares held by the Fidelity Funds. The Fidelity Funds' Board of Trustees has the sole power to vote or direct the voting of the shares held by the Fidelity funds. Fidelity Management Trust Company holds 344,144 shares, of which Edward C. Johnson III and FMR Corp., through its control of Fidelity Management Trust Company, hold sole power to dispose and, with respect to 255,460 of such shares, sole voting power. Geode Capital Management, LLC (Geode LLC) may also be deemed to be the beneficial owner of certain of such shares. Geode LLC is wholly-owned by Fidelity Investors III Limited Partnership (FILP III). Fidelity Investors Management, LLC (FIML) is the general partner and investment manager of FILP III, and is an investment manager registered under the Investment Advisors Act of 1940. The managers of Geode LLC, the members of FIML and the limited partners of FILP III are certain shareholders and employees of FMR Corp.
- (4) Includes options to purchase 194,541 shares exercisable by Ms. Andrews within 60 days of December 31, 2003.
- (5) Includes options to purchase 197,498 shares exercisable by Mr. Bryant within 60 days of December 31, 2003.
- (6) Includes options to purchase 1,762,933 shares exercisable by Dr. Chan within 60 days of December 31, 2003.
- (7) Includes options to purchase 166,803 shares exercisable by Mr. Chilton within 60 days December 31, 2003.
- (8) Includes options to purchase 158,332 shares exercisable by Mr. Chizen within 60 days December 31, 2003.
- (9) Includes options to purchase 120,000 shares exercisable by Ms. Coleman within 60 days of December 31, 2003.
- (10) Includes options to purchase 3,050,846 shares exercisable by Dr. de Geus within 60 days of December 31, 2003.
- (11) Includes options to purchase 205,451 shares exercisable by Dr. Domic within 60 days of December 31, 2003.
- (12) Includes options to purchase 171,832 shares exercisable by Dr. Newton within 60 days of December 31, 2003.
- (13) Includes options to purchase 241,666 shares exercisable by Dr. Somekh within 60 days of December 31, 2003.
- (14) Includes options to purchase 93,332 shares exercisable by Mr. Vallee within 60 days of December 31, 2003.
- (15) Includes options to purchase 185,832 shares exercisable by Mr. Walske within 60 days of December 31, 2003.
- (16) Includes options to purchase 8,011,447 shares exercisable by directors and executive officers within 60 days of December 31, 2003.

Stockholder Approval of Stock Plans

Information regarding the Company's stockholder approved and non-stockholder approved stock plans is included under Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations—Stock Option Plans* and incorporated by reference here.

Item 13. Certain Relationships and Related Transactions

Revenues derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 9.5% and 7.9% of fiscal 2003 and 2002 revenues, respectively. Andy D. Bryant, Intel Corporation's Executive Vice President and Chief Financial and Enterprise Services Officer, also serves on Synopsys' Board of Directors. Management believes the transactions between the two parties were carried out on an arm's length basis.

The Company maintains a System-on-a-Chip Venture Fund (the Fund) authorized by the Company's Board which invests in companies that will facilitate building SoCs. The fund is administered by an investment advisory board consisting of senior Company officers, including the Company's Chief Executive Officer and Chief Operating Officer, and Dr. A. Richard Newton, a member of the Board. The Fund has invested \$800,000 in a private company that develops SoC test systems. The Chairman of the Company's Audit Committee, Deborah A. Coleman, is also the Chairman of the Board for such company. Ms. Coleman did not participate in Fund's investment decision.

During fiscal 2003, Dr. A. Richard Newton, a member of Synopsys' Board of Directors, provided consulting services to Synopsys and was paid \$180,000. Under Synopsys' agreement with Dr. Newton, Dr. Newton provides advice, at Synopsys' request, concerning long-term technology strategy and industry development issues as well as assistance in identifying opportunities for partnerships with academia.

Item 14. *Principal Accounting Fees and Services*

Fees of KPMG LLP

The following table presents fees for professional audit services rendered by KPMG LLP for the audit of Synopsys' annual financial statements for fiscal 2003 and 2002, and fees billed for other services rendered by KPMG LLP.

	Year Ended October 31,	
	2003	2002
	<i>(in thousands)</i>	
Audit fees	\$2,558	\$3,235
Audit related fees ⁽¹⁾	215	312
Tax fees ⁽²⁾	537	484
All other fees	—	—
Total fees	<u>\$3,310</u>	<u>\$4,031</u>

(1) Audit related fees consisted of fees for due diligence services and consultation relating to acquisitions.

(2) Tax fees consisted of fees for international tax planning services and advice as well as fees for international tax compliance, international executive services and tax-related due diligence services for acquisitions.

Audit Committee Pre-Approval Policy

Section 10A(i)(1) of the Exchange Act requires that all non-audit services to be performed by Synopsys' principal accountants be approved in advance by the Audit Committee of the Board of Directors, subject to certain exceptions relating to non-audit services accounting for less than five percent of the total fees paid to its principal accountants which are subsequently ratified by the Audit Committee (the De Minimus Exception). Pursuant to Section 10A(i)(3) of the Exchange Act, the Audit Committee has established procedures by which the Chairperson of the Audit Committee may pre-approve such services provided the Chairperson report the details of the services to the full Audit Committee at its next regularly scheduled meeting. None of the audit-related or non-audit services described above were performed pursuant to the De Minimus Exception during the periods in which the pre-approval requirement has been in effect.

PART IV

Item 15. Exhibits, Financial Statements, Schedules and Reports on Form 8-K

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements

The following documents are included as Part II, Item 8, of this Annual Report on Form 10-K:

	<u>Page</u>
Report of Independent Auditors	48
Consolidated Balance Sheets	49
Consolidated Statements of Operations	50
Consolidated Statements of Stockholders' Equity and Comprehensive Income	51
Consolidated Statements of Cash Flows	53
Notes to Consolidated Financial Statements	54

(2) Financial Statement Schedules

None.

(3) Exhibits

See Item 15(c) below.

(b) Reports on Form 8-K

The Company filed a Current Report on Form 8-K on August 20, 2003 reporting its results of operations for the quarter ended July 31, 2003 under Item 12 thereunder.

(c) Exhibits

<u>Exhibit Number</u>	<u>Exhibit Description</u>
2.1	Agreement and Plan of Merger, dated as of December 3, 2001, among Synopsys, Inc., Maple Forest Acquisition L.L.C., and Avant! Corporation ⁽¹⁾
3.1	Amended and Restated Certificate of Incorporation ⁽²⁾
3.2	Restated Bylaws of Synopsys, Inc. ⁽³⁾
4.1	Amended and Restated Preferred Shares Rights Agreement dated April 7, 2000 ⁽⁴⁾
4.3	Specimen Common Stock Certificate ⁽⁵⁾
10.1	Form of Indemnification Agreement ⁽⁵⁾
10.2	Director's and Officer's Insurance and Company Reimbursement Policy ⁽⁵⁾
10.3	Lease Agreement, dated August 17, 1990, between the Company and John Arrillaga, Trustee, or his successor trustee, UTA dated July 20, 1977 (John Arrillaga Separate Property Trust), as amended, and Richard T. Peery, Trustee, or his successor trustee, UTA dated July 20, 1977 (Richard T. Peery Separate Property Trust), as amended ⁽⁵⁾
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<u>Exhibit Number</u>	<u>Exhibit Description</u>
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10.10	Amendment No. 6 to Lease, dated July 18, 2001, to Lease Agreement dated August 17, 1990, between the Company and John Arrillaga, Trustee, or his successor trustee, UTA dated July 20, 1997 (John Arrillaga Survivor's Trust), and Richard T. Peery, Trustee, or his successor trustee, UTA dated July 20, 1997 (Richard T. Peery Separate Property Trust), as amended ⁽⁹⁾⁽¹⁰⁾
10.11	Amendment No. 4 to Lease, dated July 18, 2001, to Lease Agreement dated June 16, 1992, between the Company and John Arrillaga, Trustee, or his successor trustee, UTA dated July 20, 1997 (John Arrillaga Survivor's Trust), and Richard T. Peery, Trustee, or his successor trustee, UTA dated July 20, 1997 (Richard T. Peery Separate Property Trust), as amended ⁽⁹⁾⁽¹⁰⁾
10.12	Amendment No. 3 to Lease, dated July 18, 2001, to Lease Agreement dated June 23, 1993, between the Company and John Arrillaga, Trustee, or his successor trustee, UTA dated July 20, 1997 (John Arrillaga Survivor's Trust), and Richard T. Peery, Trustee, or his successor trustee, UTA dated July 20, 1997 (Richard T. Peery Separate Property Trust), as amended ⁽⁹⁾⁽¹⁰⁾
10.13	Amendment No. 1 to Lease, dated July 18, 2001, to Lease Agreement dated August 24, 1995, between the Company and John Arrillaga, Trustee, or his successor trustee, UTA dated July 20, 1997 (John Arrillaga Survivor's Trust), and Richard T. Peery, Trustee, or his successor trustee, UTA dated July 20, 1997 (Richard T. Peery Separate Property Trust), as amended. ⁽⁹⁾⁽¹⁰⁾
10.14	Lease dated January 2, 1996 between the Company and Tarigo-Paul, a California Limited Partnership ⁽¹¹⁾
10.15	1992 Stock Option Plan, as amended and restated ⁽¹²⁾⁽¹³⁾
10.16	Employee Stock Purchase Program, as amended and restated ⁽¹²⁾
10.17	International Employee Stock Purchase Plan, as amended and restated ⁽¹²⁾
10.18	Synopsys deferred compensation plan dated September 30, 1996 ⁽¹²⁾⁽¹⁵⁾
10.19	1994 Non-Employee Directors Stock Option Plan, as amended and restated ⁽¹²⁾⁽¹⁶⁾
10.20	Form of Executive Employment Agreement dated October 1, 1997 ⁽¹²⁾⁽¹⁷⁾
10.21	Schedule of Executive Employment Agreements ⁽⁹⁾
10.22	1998 Nonstatutory Stock Option Plan ⁽¹²⁾⁽¹⁸⁾
10.23	Settlement Agreement and General Release by and among Cadence Design Systems, Inc., Joseph Costello, Avant! Corporation LLC, Gerald Hsu, Eric Cheng, Mitsuru Igusa and Synopsys, Inc. effective as of November 13, 2002 ⁽¹⁹⁾
10.24	Consulting Services Agreement between Synopsys, Inc. and A. Richard Newton Dated November 1, 2001 ⁽¹²⁾⁽²⁰⁾
21.1	Subsidiaries of the Company
23.1	Consent of KPMG LLP, Independent Auditors

<u>Exhibit Number</u>	<u>Exhibit Description</u>
24.1	Power of Attorney (see page 96)
31.1	Certification of Chief Executive Officer furnished pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
31.2	Certification of Chief Financial Officer furnished pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act
32.1	Certification of Chief Executive Officer and Chief Financial Officer furnished pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Exchange Act and Section 1350 of Chapter 63 of Title 18 of the United States Code

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- (1) Incorporated by reference from exhibit to Current Report on Form 8-K (Commission File No. 000-19807) filed with the Securities and Exchange Commission on December 5, 2001.
 - (2) Incorporated by reference from exhibit to the Company's Quarterly Report on Form 10-Q (Commission File No. 000-19807) for the quarterly period ended July 31, 2003.
 - (3) Incorporated by reference from exhibit to the Company's Quarterly Report on Form 10-Q (Commission File No. 000-19807) for the quarterly period ended April 3, 1999.
 - (4) Incorporated by reference from exhibit to Amendment No. 2 to the Company's Registration Statement on Form 8-A (Commission File No. 000-19807) filed with the Securities and Exchange Commission on April 10, 2000.
 - (5) Incorporated by reference from exhibit to the Company's Registration Statement on Form S-1 (File No. 33-45138) which became effective February 24, 1992.
 - (6) Incorporated by reference from exhibit to the Company's Annual Report on Form 10-K (Commission File No. 000-19807) for the fiscal year ended September 30, 1992.
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 - (15) Incorporated by reference from exhibit to the Registration Statement on Form S-4 (File No. 333-21129) of Synopsys, Inc. filed with the Securities and Exchange Commission on February 5, 1997.
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 - (17) Incorporated by reference from exhibit to the Company's Quarterly Report on Form 10-Q (Commission File No. 000-19807) for the quarterly period ended January 3, 1998.
 - (18) Incorporated by reference from exhibit to the Company's Registration Statement on Form S-8 (File No. 333-90643) filed with the Securities and Exchange Commission on November 9, 1999.
 - (19) Incorporated by reference exhibit to the Company's Current Report on Form 8-K (Commission File No. 000-19807) filed with the Securities and Exchange Commission on November 19, 2002.
 - (20) Incorporated by reference from exhibit to the Company's Quarterly Report on Form 10-Q (Commission File No. 000-19807) for the quarterly period ended April 30, 2002.

SIGNATURES

Pursuant to the requirements of section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in Mountain View, State of California, on this 29th day of January 2004.

SYNOPSYS, INC.

By: /s/ AART J. DE GEUS

Aart J. de Geus
Chief Executive Officer and Chairman of the
Board of Directors
(Principal Executive Officer)

By: /s/ STEVEN K. SHEVICK

Steven K. Shevick
Senior Vice President, Finance and Chief
Financial Officer
(Principal Financial Officer)

By: /s/ RICHARD T. ROWLEY

Richard T. Rowley
Vice President, Corporate Controller and
Treasurer
(Principal Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Aart J. de Geus and Steven K. Shevick, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ AART J. DE GEUS</u> Aart J. de Geus	Chief Executive Officer (Principal Executive Officer) and Chairman of the Board of Directors	January 29, 2004
<u>/s/ CHI-FOON CHAN</u> Chi-Foon Chan	President, Chief Operating Officer and Director	January 29, 2004
<u>/s/ ANDY D. BRYANT</u> Andy D. Bryant	Director	January 29, 2004
<u>/s/ BRUCE R. CHIZEN</u> Bruce R. Chizen	Director	January 29, 2004
<u>/s/ DEBORAH A. COLEMAN</u> Deborah A. Coleman	Director	January 29, 2004
<u>/s/ A. RICHARD NEWTON</u> A. Richard Newton	Director	January 29, 2004
<u>/s/ SASSON SOMEKH</u> Sasson Somekh	Director	January 29, 2004
<u>/s/ STEVEN C. WALSKE</u> Steven C. Walske	Director	January 29, 2004
<u>/s/ ROY VALLEE</u> Roy Vallee	Director	January 29, 2004

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