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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549  
**FORM 10-K**

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

For the year ended October 31, 2004

OR

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

Commission File Number 0-19807

**SYNOPSIS, 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 approximately \$2,971,050,000. Aggregate market value excludes an aggregate of 43,963,564 shares of common stock held by officers and directors and by each person known by the Registrant to own 5% or more of the outstanding common stock on such date. Exclusion of shares held by any of these persons should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant, or that such person is controlled by or under common control with the Registrant.

On January 1, 2005, 146,017,235 shares of the Registrant's Common Stock, \$0.01 par value, were outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

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**SYNOPSYS, INC.**  
**ANNUAL REPORT ON FORM 10-K**  
**Year ended October 31, 2004**

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## PART I

*This Annual Report on Form 10-K, particularly in Item 1. "Business" and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations," includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 (the Securities Act) and Section 21E of the Securities Exchange Act of 1934 (the Exchange Act). These statements include, but are not limited to, statements concerning: our business, product and platform strategies expectations regarding previous and future acquisitions; completion of development of our unfinished products or further development or integration of our existing products; expectations regarding bookings, revenue, earnings, changes in operating expenses, cash flows, gross margin and operating margin in fiscal 2005; continuation of current industry trends towards vendor consolidation; expectations regarding our license mix; expectations regarding future maintenance revenue; expectations regarding customer interest in more highly integrated tools and design flows; expectations of the success of our intellectual property and design for manufacturing initiatives; expectations regarding changes in our upfront and time-based revenue in fiscal 2005; expectations regarding revenue seasonality; and our expectations of our future liquidity requirements. Our actual results could differ materially from those projected in the forward-looking statements as a result of a number of factors, risks and uncertainties discussed in this Form 10-K, especially under the caption "Factors that May Affect Future Results," in Item 7 in this Form 10-K. The words "may," "will," "could," "would," "anticipate," "expect," "intend," "believe," "continue," or the negatives of these terms, or other comparable terminology and similar expressions identify these forward-looking statements. The information included herein is given as of the filing date of this Form 10-K with the Securities and Exchange Commission (SEC) and future events or circumstances could differ significantly from these forward-looking statements. Furthermore, we assume no obligation, and do not intend, to update these forward-looking statements except as required by law.*

### **Item 1. Business**

#### **Introduction**

Synopsys, Inc. (Synopsys) is a world leader in electronic design automation (EDA) software for semiconductor design. We deliver technology-leading semiconductor design and verification software platforms and integrated circuit (IC) manufacturing software products to the global electronics market, enabling the development and production of complex systems-on-chips (SoCs). We also provide intellectual property (IP) and design services to simplify the design process, and accelerate time-to-market for our customers.

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

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

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

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

- Since the early 1960s, steadily decreasing feature widths (the widths of the wires imprinted on the chip that form the transistors) and other developments have enabled IC manufacturers to follow “Moore’s law,” approximately doubling every two years the number of transistors that can be placed on a chip. As a result, state-of-the-art ICs now hold over one hundred million transistors and have feature widths of 90 nanometers (billionths of a meter), going to 65 nanometers and below.
- Microprocessors operating at more than 4 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, digital cameras, music players and personal digital assistants.
- Increasingly, single SoCs can handle functions formerly performed by multiple ICs attached to a printed circuit board.

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

### **The IC Design Process**

EDA software is central to the IC design process, enabling designers to design complex semiconductors by using a high-level, abstract description of the function of the chip. EDA software is used to automatically translate this description into successively more detailed forms, and to 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, the IC design process consists of system design, register transfer level 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 C++ or System C. This phase yields a relatively high-level behavioral model of the chip.

*Register Transfer Level (RTL) Design.* RTL design is the process of capturing the intended design functionality created at the system level using a specialized high-level computer language, typically Verilog or VHDL. This is the stage where the functionality of the final design is captured in enough detail to begin simulation and verification and determine that the final product will function as expected in the verification phase.

*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 the additional circuitry into the design that will be needed to test the chip after manufacture. In a growing number of designs, 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.* At the RTL and gate level of IC design, the designer uses functional verification tools such as RTL simulators and testbench automation and other verification tools to simulate large sets of inputs that a given IC design might confront in a 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 “place and route” products. The designer first determines the location on the chip die for each block of the chip, as well as the location for each transistor within each block, a process known as “placement.” In many designs, placement is performed in conjunction with logic synthesis, a process known as “physical synthesis.” After placement the designer adds the connections between the transistors, a process known as “routing.” The output of place and route programs is one or more data files that can be read by physical verification or mask data preparation programs.

*Physical Verification.* Before sending the chip design files to a manufacturer for fabrication, the designer must perform a series of further verification steps, checking to make sure that the final design complies with the specific requirements of the fabrication facility that will manufacture the chip. 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 (particularly functional and physical verification) 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, performing simulation over again, and repeating other steps 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 are seeking to maximize the quality of results of their IC design efforts, while minimizing the costs of achieving these results and shortening the time needed to launch the manufactured IC, as follows:

- *Quality of Results.* Customers are concerned about differentiating their chips from their competitors’ in a number of areas, including size or area, speed, functionality, power consumption and performance. The designer must balance each issue against the others, making key tradeoff decisions—often through multiple iterations—to reach a final design. As chips become more complex and manufacturing geometries shrink, this balancing of factors becomes disproportionately more difficult, and requires designers to successfully address technical issues, including:
  - *Timing closure:* achieving consistency between the speed of the chip at the logic design phase and the speed of the chip at the physical design phase;
  - *Signal integrity:* ensuring chip performance is not affected by unintended 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 the chip’s power consumption, an important objective for chips to be used in battery-operated devices, particularly in the case of laptop computers and cell phones where both longer battery life and lower power drain in standby mode is critical;
  - *Design for test:* embedding circuits in the design that allow the chip, once manufactured, to be tested rapidly and at a reasonable cost;
  - *Verification:* verifying that the chip will perform as intended, which has become the single most time-consuming and resource intensive aspect of overall design;

- *Manufacturability*: faithfully translating the design produced by EDA tools into a manufacturable pattern of wires and transistors on the chip has become significantly more difficult as a result of decreasing feature widths and increasing feature density; and
- *Yield*: ensuring that an acceptable number of good chips per wafer can be manufactured successfully.
- *Cost of Results*. Customers are continually seeking to constrain their costs, including costs of design, masks, equipment, facilities and support, all of which typically increase as chips become more complex. 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 EDA software costs and maximizing their yield in manufacture. 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.
- *Time to Results*. Finally, customers are seeking to improve the predictability of their production 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 the challenges described above while reducing overall design time.

## Strategy

We provide products and services that help our customers design leading-edge ICs while maximizing achievement of their quality of results, cost of results and time to results goals.

Historically, customers have purchased individual “point tools” to complete one or more tasks or sets of tasks in the design process, dealing internally with moving from one design environment or data set to the next, while integrating various products—or even developing design tools—themselves where necessary. However, with the increasing complexity of IC design, cost pressures and ever smaller market windows, customers require broader solutions with greater performance from fewer vendors at lower costs.

To meet this need, we have combined our individual products—many of which lead their respective categories—into platforms, or collections of products that are integrated through the use of common interfaces, data sets and other technologies, to deliver a comprehensive, faster and more reliable design flow. In fiscal 2003, we released our Galaxy™ Design and Discovery™ Verification platforms, which together provide complete implementation and verification solutions to our customers. In fiscal 2004, we delivered the Galaxy 2004 platform, providing full, cross-platform correlation in area, timing, power, signal integrity and test, as well as significant speed and capacity improvement. We also delivered substantial improvements to the capabilities, speed, capacity and accuracy of our Discovery Verification platform.

To help our customers better manage time, cost and risk, we have also continued to invest in pre-designed, pre-verified and reusable intellectual property blocks our customers can use rather than build internally. These blocks include our DesignWare® Foundation Library of reusable, basic chip elements which can be pulled into designs during logic synthesis, our DesignWare Verification Library of reusable chip function models to accelerate simulation and verification, and our DesignWare Cores that implement many of the most important industry standards for digital and analog connectivity, including USB and PCI Express. We also provide professional services to assist our customers with their most difficult design challenges.

Finally, recognizing the challenges of manufacturing at feature widths smaller than the wavelength of light, and envisioning the benefits of taking manufacturing and yield issues into account during the design process, we have also continued to invest in our portfolio of Design for Manufacturing tools and technologies.

## **Organization**

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

- *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.
- *Silicon Engineering Group*: focuses on our Design for Manufacturing initiatives and analog/mixed-signal design and verification products.
- *Solutions Group*: develops and markets our DesignWare® portfolio of pre-designed IP solutions for chip designers and provides turnkey IC design and on-site design assistance, among other services.

Our other groups include Finance, Human Resources and Facilities, Marketing, Worldwide Sales and Worldwide Application Services.

## **Products and Services**

Our products and services focus on the principal needs of semiconductor designers and, at a business level, are divided into our Implementation, Verification, Silicon Engineering and Solutions groups described 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*, incorporated by reference here.

### ***Implementation Group***

*Galaxy Design Platform.* Our Galaxy Design Platform includes our logic synthesis, physical synthesis, physical design, timing analysis, signal integrity analysis and physical verification products, as well as certain analog and mixed-signal tools, including:

- *Design Compiler*® logic synthesis product, used by a broad range of IC design companies to optimize their designs for performance and area. With our Galaxy 2004 platform release, our Design Compiler product is up to three times faster than last year's release, has up to 25% more design capacity, and now supports System Verilog, an emerging hardware design language.
- *Physical Compiler*® physical synthesis product, which unites logic synthesis and placement functionality and addresses critical timing problems encountered in designing advanced ICs and SoCs. In fiscal 2004, we significantly improved the Physical Compiler product's run time and capacity.
- *Module Compiler*™ data path design product, which allows designers to reuse their datapath structures to obtain the best implementation for their designs.
- *Power Compiler*™ power management product, which helps designers manage and verify power consumption at different stages of the design process. The 2004 version of our Power Compiler product is up to ten times faster than the previous version.

- *DFT Compiler*<sup>™</sup> design testing product, which inserts functional and test logic required to enable efficient, high-coverage testing of the chip after manufacture.
- *JupiterXT*<sup>™</sup> design planning or floorplanning product, that allows designers to quickly partition their chip design into functional blocks that can be separately optimized for logic and physical design. The 2004 version of our JupiterXT product has two times the capacity, and creates a detailed floorplan three times faster, than the previous version..
- *Apollo*<sup>™</sup> basic physical design product used for the placement and routing of a chip.
- *Astro*<sup>™</sup> advanced physical design system, which enables optimization, placement and routing while concurrently accounting for physical effects. Our fiscal 2004 release of the Astro tool runs up to two times faster and has up to a 40% increase in capacity.
- *PrimeTime*<sup>®</sup>/*PrimeTime*<sup>®</sup> SI timing analysis products that measure and analyze the speed at which a design will operate when it is fabricated. The PrimeTime SI tool analyzes the effect of cross-talk and noise on timing, an increasingly important issue at chip geometries below 180 nanometers. The 2004 version of our PrimeTime tool runs up to three times faster and has up to three times the capacity as the prior version.
- *Tetra Max*<sup>®</sup> test pattern generation product family which automatically generates high-quality test vectors to improve the design process.
- *Star-RCXT*<sup>™</sup> extraction solution for analyzing IC layout data and determining key electrical characteristics of a chip, such as capacitance and resistance.
- *Hercules*<sup>™</sup> physical verification product family, which performs hierarchical design-rule checking, electrical rule checking, and layout versus schematic verification. During fiscal 2004, we delivered a faster version of the Hercules tool with higher multi-CPU scalability and broader foundry support.
- *Milkyway*<sup>™</sup> Database, 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. Interfaces to our open Milkyway database have been made available to our customers and other EDA vendors to reduce integration costs for our customers and advance tool interoperability in the industry.

The Galaxy Design Platform provides our customers a single, integrated IC design solution based on leading individual products and incorporating common libraries and consistent timing, delay calculation and constraints throughout the design process. The platform uses our open Milkyway database and allows designers the flexibility to integrate internally developed and third-party tools. With this advanced functionality, common foundation and flexibility, our Galaxy Design Platform helps reduce design times, decrease integration costs and minimize the risks inherent in advanced, complex IC designs. During fiscal 2004, we released the Galaxy 2004 platform, the latest version of the Galaxy Design Platform, which delivers significantly improved quality of results, time to results and cost of results through greater correlation among the platform's individual products in addressing area, timing, power, signal integrity and test issues. We also introduced our Galaxy Power solution in fiscal 2004, offering designers the ability to improve the power efficiency of their ICs.



## *Verification Group*

*Discovery Verification Platform.* Our Discovery Verification Platform includes our verification and simulation products. The increasing size and complexity of today's ICs and SoCs have vastly increased the time and effort required to verify chip designs, with verification estimated to consume 60% to 70% of total design time. As a result, reducing verification "risk" (i.e. minimizing the possibility of finding design "bugs" when the ICs are delivered from the foundry) has become increasingly important to customers. To manage and reduce this verification risk, 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.

Our Discovery Verification Platform includes the following principal products:

- *VCS*<sup>®</sup> functional verification product, the engine of the Discovery Verification Platform and often used in simulation "farms" consisting of hundreds of computers. The VCS product includes technologies that support model development, testbench creation, coverage feedback and debugging techniques. Our fiscal 2004 release of the VCS product expands support of our *Vera*<sup>®</sup> product, making testbench automation native to VCS, and helping post a two to five times improvement in runtime.
- *System Studio* system level design product focused on system-level algorithm and architecture design and analysis, as well as the interaction between software and hardware and permits designers to model various architectural alternatives for their chips at a system level.
- *Vera*<sup>®</sup> testbench generator, which automates the creation of testbenches, custom models that provide simulation inputs and respond to simulated outputs from the design during verification. Automating this process significantly improves verification quality. The 2004 release of the *Vera* product is up to 10 times faster than its predecessor and is also available native to the VCS product, providing increased productivity benefits.
- *LEDA*<sup>®</sup> design rule checker, which enhances a designer's ability to check a design to ensure it can be for synthesized, simulated, tested and reused.
- *Formality*<sup>®</sup> formal verification solution, which compares two versions of a design to determine if they are equivalent. The use of formal verification reduces the need to perform functional verification, which is substantially more time-consuming, thus potentially saving a significant amount of time in the overall design process.
- *Magellan*<sup>™</sup> hybrid formal verification product, which combines functional and formal verification technologies to allow engineers to find deep, corner-case design defects during verification.
- *NanoSim*<sup>®</sup> simulation and analysis product for analog and mixed signal verification, which offers circuit simulation, timing and power analysis in a single solution. The *NanoSim* product is a key component of our Discovery AMS verification solution.
- *HSPICE*<sup>®</sup> circuit simulator, which offers high-accuracy, transistor-level circuit simulation, thereby enabling designers to better predict the timing, power consumption and functionality of their designs. During fiscal 2004, we announced enhancements to the HSPICE tool resulting in significant improvements in performance and support for high-frequency and RF IC designs.
- *Verification IP* reusable IP that are designed to test specific functions and adherence to industry protocols in an IC design, which we believe is becoming increasingly important to more quickly achieving verification sign-off.

In fiscal 2004, we delivered the Discovery AMS solution, a subset of our verification technologies optimized to perform verification on analog and mixed signal designs.

### ***Silicon Engineering Group***

Our Silicon Engineering Group develops and markets our products and initiatives relating to design for manufacturing and analog/mixed signal IC design and verification.

*Design for Manufacturing.* We offer a variety of products and technologies used at the intersection of IC design and manufacturing which address a number of issues, principally the need to precisely model structures in small geometry ICs and the problems encountered when using photolithography techniques to manufacture ICs containing feature dimensions smaller than the wavelength of light during production. These products are designed to enhance yield, which is becoming increasingly challenging as chip geometries continue to shrink. In addition to our Hercules product, described above under the Galaxy platform our Design for Manufacturing initiatives include our:

- *TCAD* products, which precisely model individual structures or devices within an IC design to help ensure manufacturability at small geometries. We see TCAD tools as increasingly important to help customers shorten the time to ramp up their production yields, and therefore reduce their manufacturing costs. In this regard, we have made significant investments to expand our TCAD offering, including our November 2004 acquisition of ISE Integrated Systems Engineering AG, a privately-held Swiss company which offered various TCAD products, including three dimensional device simulators. We also introduced our Taurus Process Atomistic product which models processes at the atomic level for improved performance.
- *Proteus OPC/InPhase* optical proximity correction (OPC) products which embed and verify corrective features in an IC design and masks to improve manufacturing results for subwavelength feature width design. OPC changes mask geometries to compensate for distortions caused by optical diffraction and resist process effects. During fiscal 2004, we announced improvements to Proteus to provide near linear scalability.
- *Phase Shift Masking Technologies* consist of mask design techniques that use optical interference to improve depth-of-field and resolution in subwavelength photolithography for designs at 90 nanometers and below.
- *SiVL<sup>®</sup> (Silicon versus Layout)* layout verification product that 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.
- *CATS<sup>®</sup>* 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.
- *Virtual Stepper<sup>®</sup>* mask qualification product, which checks mask quality and analyzes printability of mask defects, helping to separate true defects from nuisance defects.

*Analog and Mixed-Signal Tools.* The Silicon Engineering Group also manages a number of products described above and functionally included in our Galaxy and Discovery platforms that have advanced analog and mixed-signal design capabilities. These products include the NanoSim and HSPICE circuit simulators. In addition, this category includes our Cosmos™ product, which uses schematic-driven layout technology to place and route full-custom ICs, and our Circuit Explorer optimization and analysis product for complex analog designs.

### ***Solutions Group***

Synopsys' Solutions Group includes our portfolio of IP products and components and our Professional Services Group.

*Intellectual Property Products.* As IC designs continue to grow in size, reusing proven design blocks has become an increasingly important way to reduce overall design cost and cycle time. Because

verification accounts for such a large proportion of total chip design time, reusing pre-designed and verified IP components can keep projects on schedule by ensuring that the “designed in” portions of the chip are “pre-verified” and thus will not contain errors. 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. For these reasons, IC designers are consolidating 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 incorporates into the design during the logic synthesis stage.
- *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 digital and mixed-signal 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. During fiscal 2004, we announced availability of DesignWare PCI Express physical layer IP core, enabling lower cost ICs. We also acquired Accelerant Networks, Inc., giving our customers access to SERDES technology and additional connectivity IP solutions. Finally, during the year we acquired Cascade Semiconductor Solutions, Inc., adding their root-and-switch port IP. As a result, we believe we offer the industry’s most complete PCI Express portfolio.

*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, from on-site design assistance to help our customers design, verify and/or test their chips and improve their design processes, to full turnkey development and training.

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

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

Software maintenance services include minor product enhancements 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. Our SolvNet solution 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, for additional charges, 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 products and methodologies used in our design and verification flows, as well as specialized modules addressing system design, logic design, physical design, simulation and test. We offer regularly scheduled 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 8,750 engineers attended Synopsys workshops during fiscal 2004, compared to approximately 8,500 in 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, although 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.

### **Support for Industry Standards**

We actively create and support standards that 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 that promotes 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<sup>SM</sup> 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 our TAP-in program include our Liberty<sup>TM</sup> format for library modeling, SDC for design constraints, SAIF for switching activity, our OpenVera<sup>®</sup> language for hardware verification, and Open MAST for electromechanical design modeling. Synopsys' common database, Milkyway, is available for tool integration by EDA vendors through our MAP-in<sup>SM</sup> 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 run 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 in the United States and principal foreign markets. We typically distribute our products and documentation to customers electronically, but provide physical media (i.e. CD-ROMs) when requested by the customer. We 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.

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

In limited circumstances, we have used distributors to assist us in the sale of certain products in specified markets. See Note 12 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data* for additional information about one of our former distributors.

In fiscal 2004, 2003 and 2002, foreign revenues represented 45%, 43% and 35%, respectively, of Synopsys' total revenue. Additional information relating to domestic and foreign operations is contained in Note 10 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.*

Historically, our orders and revenue have been lowest in our first quarter and highest in our fourth quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year, although the timing of major license renewals can alter this typical trend. However, as a result of the shift in our license model, as more fully described in Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Orders and Revenue Seasonality*, we expect less revenue seasonality beginning in fiscal year 2005.

Synopsys' aggregate non-cancelable backlog was approximately \$1.48 billion on October 31, 2004, representing an approximately 8% decrease from the end of fiscal 2003. Aggregate non-cancelable backlog includes deferred revenue, operational backlog and financial backlog and excludes all items relating to consulting services. Deferred revenue represents that portion of orders for software products, license maintenance and other services which has been delivered and billed to the customer but on which the revenue has not yet been earned. Operational backlog consists of orders for software products sold under perpetual or term licenses and TSLs with customer-requested ship dates within three months that have not been shipped. Financial backlog consists of future installments under time-based licenses and maintenance which are not yet currently due and payable. Our aggregate backlog at the end of fiscal 2004 including consulting was approximately \$1.53 billion, approximately 9% lower than at the end of fiscal 2003.

We have not historically experienced material order cancellations.

See Item 13. *Certain Relationships and Related Transactions* for information concerning customers accounting for more than 10% of our revenue during fiscal 2004.

### **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 product group. In addition, an Advanced Technology Group within Synopsys' Silicon Engineering Group explores new technologies and maintains strong research relationships outside Synopsys with both industry and academia.

During fiscal 2004, 2003 and 2002, research and development expenses, net of capitalized software development costs, were \$285.3 million, \$285.9 million and \$225.5 million, respectively. Synopsys capitalized software development costs were approximately \$2.7 million, \$2.6 million and \$1.6 million in fiscal 2004, 2003 and 2002, respectively. We expect sales and marketing expense to increase slightly in fiscal 2005 as a result of increased headcount from acquisitions during fiscal 2004 and higher targeted incentive compensation.

### **Competition**

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

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

### **Product Sales and Licensing Agreements**

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

Under certain circumstances, we provide our customers the right to exchange a portion of the software they initially license for other specified Synopsys products. For example, a customer may use our front-end design products for a portion of the license term and then exchange such products for back-end placement software for the remainder of the term in order to complete the customer's IC design. This practice helps assure the customer's access to the complete design flow needed to design its product. The customer's exchange of product for other existing products, when so provided under the customer agreement, does not alter the timing of recognition of the license fees paid by the customer, which is governed by our revenue recognition policies. The ability to offer this right to customers often gives us an advantage over competitors who offer a narrower range of products, because customers can obtain more of their design flow from a single vendor and because customers then have an opportunity to try additional Synopsys tools before licensing them separately. At the same

time, because in such cases the customer need not obtain a new license and pay an additional license fee for the use of the additional products, the use of these arrangements could result in reduced revenue compared to licensing the individual products separately without exchange rights.

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

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

Finally, our 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.

### **Employees**

As of October 31, 2004, Synopsys had 4,378 full-time employees, with 2,940 based in North America and 1,438 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 significant start-up activity, and our headquarters is located in Silicon Valley, where competition for the most highly skilled technical, sales and management employees is intense.

## **Item 2. Properties**

### **United States Facilities**

Synopsys' principal offices are located in four adjacent buildings in Mountain View, California, which together provide approximately 400,000 square feet of available space. This space is leased through February 2015. Within one half mile of these buildings, in Sunnyvale, California, Synopsys occupies approximately 200,000 square feet of space in two adjacent buildings under lease through April 2007, and approximately 72,000 square feet of space in a third building under lease through April 2007. We use these buildings for administrative, marketing, research and development, sales and support activities.

We own two buildings totaling approximately 230,000 square feet on approximately 43 acres of land in Hillsboro, Oregon. Only one of these buildings is occupied, and is used for administrative, marketing, research and development and support activities. In addition, we lease approximately 80,000 square feet of space in Marlboro, Massachusetts for sales and support, research and development and customer education activities. This facility is leased through January 2009.

Synopsys owns a third building in Sunnyvale, California with approximately 120,000 square feet, which is leased to a third party through 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.

### **International Facilities**

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

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

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

### **Item 3. Legal Proceedings**

On August 25, 2004, a class action complaint entitled *Kanekal v. Synopsys, Inc., et al.*, No. C-04-3580, was filed in federal district court for the Northern District of California against Synopsys and certain of our officers alleging violations of the Exchange Act. The complaint purports to be a class action lawsuit brought on behalf of persons who acquired Synopsys stock during the period of December 3, 2003 through August 18, 2004. The complaint alleges that the individual defendants caused Synopsys to make false and misleading statements about Synopsys' business, forecasts, and financial performance, and that certain Synopsys officers or employees sold portions of their stock holdings while in the possession of adverse, non-public information. The complaint does not specify the amount of damages sought. In November 2004, the Court appointed a lead plaintiff in the case. As a result, Synopsys expects the plaintiff to file an amended complaint in January 2005. Discovery has not commenced in the case and no trial date has been established. While management intends to defend against these federal securities claims vigorously, and Synopsys does not believe that this lawsuit will have a material effect on Synopsys' financial position, results of operations or cash flows, there can be no assurance as to the ultimate disposition of this lawsuit.

After the end of fiscal 2004, and in connection with our December 1, 2004 announcement that we have signed agreements to acquire Nassda Corporation (Nassda) and to settle all outstanding litigation between the two companies, a class action complaint entitled *Robert Israel v. Nassda Corporation, et al.*, No. 4705695, was filed in the Court of Chancery of the State of Delaware naming Nassda, its directors and Synopsys as defendants. The complaint purports to be a class action lawsuit brought on behalf of shareholders of Nassda, other than the defendant directors and their affiliates, who allegedly



would be injured or threatened with injury if the proposed acquisition of Nassda by Synopsys proceeded forward on the terms announced. The purported class action seeks to enjoin the transaction, or alternatively, damages. The complaint does not specify the amount of damages sought. Synopsys believes the claims in this purported class action are without merit, and intends to defend against them vigorously.

**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 2004.

**Executive Officers of the Registrant**

The executive officers of Synopsys and their ages as of December 31, 2004, were:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Aart J. de Geus	50	Chief Executive Officer and Chairman of the Board of Directors
Chi-Foon Chan	55	President and Chief Operating Officer
Steven K. Shevick	48	Senior Vice President, Finance and Chief Financial Officer
Vicki L. Andrews	49	Senior Vice President, Worldwide Sales
Raul Camposano	49	Senior Vice President, Chief Technology Officer and General Manager, Silicon Engineering Group
John Chilton	47	Senior Vice President and General Manager, Solutions Group
Janet S. Collinson	48	Senior Vice President, Human Resources and Facilities
Antun Domic	53	Senior Vice President and General Manager, Implementation Group
Manoj Gandhi	44	Senior Vice President and General Manager, Verification Group
Jay N. Greenberg	57	Senior Vice President, Marketing
Deirdre Hanford	42	Senior Vice President, Worldwide Application Services
Rex S. Jackson	44	Vice President, General Counsel and Corporate Secretary

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

*Dr. Chi-Foon Chan* 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. In addition, 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, General Counsel 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, Chief Technology Officer and General Manager, Silicon Engineering Group since July 2004. Prior to that time, he was Senior Vice President and Chief Technology Officer from September 2000 to July 2004, and 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 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 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.

*Jay N. Greenberg* joined Synopsys in November 2004 as Senior Vice President, Marketing. From March 2003 until joining Synopsys, Mr. Greenberg was President of Green Mountain Solutions, a consulting firm that he also founded. From March 1999 to March 2003 Mr. Greenberg was employed by Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC), where he held the positions of Vice President of Business Development and Vice President of Strategic Marketing. Mr. Greenberg served as Vice President and Senior Partner at Thomas Group, Inc., a consulting firm, from 1987 through 1998. Mr. Greenberg has also held executive, management and technical positions at Memorex, Amdahl and EDS. Mr. Greenberg holds a B.A. from the University of the Pacific in Stockton, California.

*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 American Electronics Association's national board of directors.

*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 January 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, Related Stockholder Matters and Issuer Purchases of Equity Securities

The table below sets forth information regarding repurchases of Synopsys common stock by Synopsys during the fiscal quarter ended October 31, 2004.

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 Remaining Purchasable Under The Programs As Of End Of Period
Month #1 August 1, 2004 through September 4, 2004 . . . .	3,727,345	\$15.4021	3,727,345	\$154,253,651
Month #2 September 5, 2004 through October 2, 2004	3,215,000	16.3366	3,215,000	101,731,402
Month #3 October 3, 2004 through October 31, 2004 . . . . .	1,554,812	16.1025	1,554,812	76,695,086
Total . . . . .	<u>8,497,157</u>	\$15.8838	<u>8,497,157</u>	\$ 76,695,086

All shares were purchased pursuant to a \$500 million stock repurchase program originally approved by Synopsys' Board of Directors in July 2001 and renewed in December 2002 and December 2003. Funds are available until expended or until the program is suspended by the Chief Financial Officer or the Board of Directors. Effective and announced on December 1, 2004 the Board of Directors renewed the stock repurchase program, authorizing up to \$500 million in additional share repurchases, not including amounts expended prior to such date.

The remaining information required by Item 5 is set forth in Note 14 of our *Notes to Consolidated Financial Statements* in Part II, Item 8. *Financial Statements and Supplementary Data*, incorporated by reference here.

### Item 6. Selected Financial Data

#### Financial Summary

	Fiscal Year Ended October 31,(1)				
	2004	2003	2002	2001	2000
	(in thousands, except per share data)				
Revenue . . . . .	\$1,092,104	\$1,176,983	\$ 906,534	\$ 680,350	\$ 783,778
Income (loss) before income taxes and extraordinary items(2) . . . . .	91,592	218,989	(288,940)	83,533	145,938
Provision (benefit) for income taxes . . . . .	17,255	69,265	(88,947)	26,731	48,160
Net income (loss) . . . . .	74,337	149,724	(199,993)	56,802	97,778
Earnings (loss) per share(3):					
Basic . . . . .	0.48	0.99	(1.50)	0.47	0.71
Diluted . . . . .	0.46	0.95	(1.50)	0.44	0.69
Working capital . . . . .	171,878	434,247	151,946	254,962	331,857
Total assets . . . . .	2,092,187	2,307,353	1,978,714	1,128,907	1,050,993
Long-term debt . . . . .	7,443	7,219	6,547	73	564
Stockholders' equity . . . . .	1,265,049	1,433,410	1,113,481	485,656	682,829

- (1) Synopsys has a fiscal year that ends on the Saturday nearest October 31. Fiscal 2004, 2003, 2002, and 2000 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.
- (2) Includes charges of \$1.6 million, \$19.8 million, \$87.7 million, and \$1.7 million for fiscal 2004, 2003, 2002, and 2000, respectively, for in-process research and development. Fiscal 2002 includes merger-related and other costs of \$33.5 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**

### **Overview**

*The following summary of our financial condition and results of operations is qualified in its entirety by the more complete discussion contained in this Item 7 and by the risk factors set forth below under the caption entitled "Factors That May Affect Future Results."*

Synopsys is a world leader in EDA software for semiconductor design. We deliver technology-leading semiconductor design and verification software platforms and IC manufacturing software products to the global electronics market, enabling the development and production of complex SoCs. We also provide IP and design services to simplify the design process and accelerate time-to-market for our customers.

#### *Fiscal 2004 Business Environment*

We generate substantially all of our revenue from the semiconductor and electronics industries. Our customers typically fund purchases of our software and services out of their research and development (R&D) budgets. As a result, our business is heavily influenced by our customers' business outlook and willingness to invest in new, and increasingly complex, chip designs.

Beginning in late calendar 2000, the semiconductor industry experienced its steepest and longest downturn of the past 20 years. Semiconductor industry sales dropped approximately 46% from late 2000 to early 2002 and then recovered slowly into 2003. Throughout this period, our customers took many steps to reduce their expenses, including constraining R&D expenditures, reducing the number of design engineers they employed, cutting back on their design starts, purchasing from fewer suppliers, and requiring more favorable pricing, payment and license terms from those suppliers, as well as pursuing consolidation within their own industry. Further, during this downturn, many semiconductor design companies failed or were acquired and the pace of investment in new companies declined.

The Semiconductor Industry Association reported semiconductor industry growth of approximately 18% in 2003 and estimates growth in 2004 of approximately 29%. Historically, growth in semiconductor sales has been followed by growth in semiconductor R&D spending, which in turn has led to growth in EDA expenditures. This relationship is not precise, however, and in the past there has been a lag of several quarters between an upturn in semiconductor industry sales and growth in EDA spending. At the beginning of fiscal 2004, we based our forecast for the year in part on our expectations that the forecasted continued recovery in semiconductor revenue and improving conditions in the U.S. economy would lead to significantly increased spending on EDA products by our customers. However, by the end of our third fiscal quarter, it became clear that EDA spending growth was not tracking the upturn in the semiconductor industry.

We believe EDA spending has not tracked the industry's recovery for a number of reasons. First, in light of the severity of the 2000-2002 downturn, we believe customers' intense focus on expense reduction persists, and that they now generally approach spending more conservatively. In addition, the semiconductor industry's recovery has been driven primarily by the consumer electronics market, where product price is a primary competitive factor, further increasing pressure on our customers to control costs, including by limiting their EDA spending.

In addition to these broader trends, we believe our customers turned more cautious about their own business outlook in mid-calendar 2004 due to a number of factors, including lack of visibility into their own future results, unexpected inventory buildup in the semiconductor supply chain and concerns about the industry's growth prospects in 2005. As a result, we believe our customers became more reluctant to extend or increase their existing commitments to us and to agree to upfront payment terms for multi-year licenses. These developments materially and adversely affected both our bookings and revenue for fiscal year 2004. In particular, lower than expected upfront license bookings adversely

impacted our third quarter of fiscal 2004 results, since we recognize all revenue from upfront licenses in the quarter they are shipped. Lower than expected time-based license bookings also adversely affected our results for the year and will adversely affect our future results, as a less-than-expected amount was added to our backlog to be recognized in future periods.

Following the third quarter of fiscal 2004, we re-evaluated customer demand for upfront licenses, which require customers to pay at least 75% of the license fee in the first year. Our customers' increased preference for conserving cash by paying for licenses over time has made upfront payment terms a significantly more difficult negotiating issue. Accordingly, effective in the fourth quarter of fiscal 2004, we shifted our target license mix to consist almost entirely of time-based licenses. For the fourth quarter of fiscal year 2004, upfront licenses constituted approximately 7% of license orders, compared to an average of approximately 24% since our original introduction of time-based licenses in August 2000. This shift negatively impacted revenue, earnings and cash flow from operations for the quarter as many orders which previously would have generated revenue, and in many cases cash, upfront instead were booked as TBLs, contributing primarily to backlog for future quarters.

Our results in the third quarter and the license mix shift in the fourth quarter resulted in lower revenue, earnings and cash flow from operations in fiscal 2004 compared to fiscal 2003. In addition, due to our further license mix transition we expect revenue, earnings and cash flow from operations for the first three quarters of fiscal 2005 under the new model to be below the comparable quarters under the old, higher upfront model in fiscal 2004. However, we believe making this transition meets our customers' needs while enabling us to better preserve the value of our technology and enhance the predictability of our business.

We continue to believe that, over the long-term, any growth in EDA spending will continue to depend on growth in semiconductor R&D spending and on continued growth in the overall semiconductor market. The Semiconductor Industry Association has forecasted semiconductor revenues to be flat in 2005 and to grow modestly in 2006. Accordingly, and with our continuing license model shift and our expectation of a relatively low level of major customer license renewals in fiscal 2005 based on scheduled renewal dates, we expect our revenue, earnings and cash flow from operations for fiscal 2005 to be below fiscal 2004.

Synopsys is under no obligation (and expressly disclaims any such obligation) to update or alter any of the information contained in this Overview, whether as a result of new information, future events or otherwise.

#### *Fiscal 2004 Product Developments*

During fiscal 2004, we announced or introduced a number of enhancements to our products, including:

- Delivery of our Galaxy 2004 platform, a major enhancement to our original Galaxy Design Platform, offering substantial improvements in speed, capacity, quality of results and process technology support, and representing two years of work integrating products acquired in our acquisition of Avant! Corporation with Synopsys' core products.
- Release of our Discovery AMS solution, a subset of our verification technologies optimized for verification of analog and mixed-signal designs.
- Enhancements to our PrimeTime timing analysis product, increasing speed and capacity by up to three times compared to the prior version.
- Delivery of our Galaxy Power solution, offering designers the ability to improve the power efficiency of their ICs.

- Enhancements to our HSPICE circuit simulator, providing up to 20 times better performance and supporting high-frequency and RF IC designs.
- Improvements to our Proteus OPC product, providing near linear scalability when using industry-leading processors.
- Availability of DesignWare PCI Express physical layer IP core, enabling lower cost IP.

*Fiscal 2004 Financial Performance Summary*

- Orders were \$956 million versus \$1,368 million in fiscal 2003, reflecting the trends and developments discussed above in “Fiscal 2004 Business Environment” and the timing of a major contract renewal which was expected to be completed in fiscal 2004, but was not completed until the first quarter of fiscal 2005. Our book-to-bill ratio in fiscal 2004 and fiscal 2003 was approximately 0.9 and 1.2, respectively.
- Revenue was \$1,092 million, down 7% from fiscal 2003, due primarily to a lower level of orders than expected in the first three quarters of fiscal 2004, the shift in license mix during the fourth quarter to an almost completely ratable model and a decrease in maintenance revenue.
- Time-based revenue increased 7% from fiscal 2003 to \$663 million, primarily reflecting recognition of revenue on increased time-based orders in fiscal 2003. Upfront license revenue declined 28% from \$298 million to \$216 million, due primarily to a lower-than-expected level of upfront license orders in the third quarter and to the license model shift effective in the fourth quarter.
- For the year, we derived approximately 25% of our software revenue from upfront licenses and 75% from time-based licenses, versus approximately 33% and 67%, respectively, during fiscal 2003. The percentage of software revenue from upfront licenses was 29% in the first half of the fiscal year and 20% in the second half of the fiscal year, reflecting lower-than-expected upfront license bookings in the third quarter and the shift from upfront licenses to time-based licenses in the fourth quarter, each of which translated into a reduction in the revenue from upfront license orders. Reflecting this shift, during the fourth quarter, approximately 90% of our revenue was derived from backlog attributable to prior period time-based license bookings.
- Maintenance revenue declined by 23% from \$220 million in fiscal 2003 to \$170 million, primarily reflecting the lower-than-expected level of upfront license orders, which led to a lower level of new maintenance orders, the shift of some upfront licenses to TSLs (under which maintenance is included with the license fee and therefore is not reported separately), and non-renewal of maintenance by certain customers compared to fiscal 2003.
- Professional service and other revenue, at \$43 million, increased slightly from \$41 million for fiscal 2003, primarily as a result of customers’ continued use of outside consultants to augment their internal staff and to assist in implementing their advanced IC designs.
- Net income was \$74 million compared to \$150 million in the fiscal 2003, primarily due to lower revenue and other income, an increase in cost of services revenues due to increased field support headcount and higher amortization of intangible assets from acquisitions.
- Cash provided by operations for fiscal 2004 was \$264 million compared to \$392 million for fiscal 2003, driven primarily by lower orders and reported revenues compared to fiscal 2003, cash disbursements for foreign income taxes, higher general and administrative expenses and workforce realignment expenses.
- We repurchased 16.9 million shares of our common stock in fiscal 2004 for approximately \$423 million. In December 2004, after the end of the fiscal year, our Board renewed the stock

buyback program, restoring the authorization to repurchase up to \$500 million of our common stock.

#### *Fiscal 2004 Acquisitions*

In fiscal 2004, we acquired (i) Accelerant Networks, Inc. (Accelerant) to enhance our standards-based IP solutions; (ii) Cascade Semiconductors, Inc. (Cascade), to augment our IP portfolio of PCI Express products; and (iii) the technology assets of Analog Design Automation, Inc. (ADA) to expand our analog and mixed-signal offerings. In addition, in fiscal 2004 we completed one additional acquisition and two additional asset acquisition transactions we do not consider material for financial statement purposes. After the fiscal year end, we completed the acquisition of ISE Integrated Systems Engineering AG (ISE), broadening our TCAD product line and announced the proposed acquisition of Nassda Corporation, which would settle our outstanding litigation and enhance our circuit simulation offerings.

#### **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 and goodwill;
- Income taxes; and
- Allowance for doubtful accounts.

*Revenue Recognition.* 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*.

With respect to software sales, during fiscal 2004, we utilized three license types:

- *Technology Subscription Licenses* (TSLs) 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. Maintenance is bundled for the term of the license and not purchased separately.
- *Term Licenses* are also for a finite term, usually 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 sometimes refer to TSLs and term licenses, either individually or collectively, as “renewable licenses” because the customer must purchase an extension or a new license in order to continue using the software after the specified term of the contract expires. In a renewal transaction, we may either replace the pre-existing arrangement with an entirely new arrangement or maintain two agreements. Where we replace the existing agreement, we often supersede the original arrangement and thereafter deliver software and recognize revenue based upon the type of license reflected in the new agreement. Where we maintain two agreements, we recognize revenue on the new incremental agreement based upon the new license type purchased. If we grant extended payment terms (as discussed below), we recognize license revenue as payments become due and payable.

Customers occasionally convert their existing TSLs to perpetual licenses, paying an incremental fee which we recognize upon contract signing in accordance with AICPA Technical Practice Aid (TPA) 5100.73, 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 fee as a new sale and recognize revenue when all other revenue recognition criteria have been met.

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

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 and all other revenue recognition criteria are met. For perpetual licenses in which less than 75% of the license fee is payable within one year from shipment, we recognize the revenue as customer installments become due and payable.
- *Upfront term licenses.* We recognize term license fees 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 and all other revenue recognition criteria are met.

Time-Based License (TBL) 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 we offer extended payment terms (i.e., where less than 75% of the TSL license fees are due within one year from shipment), we recognize revenue from TSLs in an amount equal to 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.

Service 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.
- *Professional Service Fees.* We generally recognize revenue from consulting and training services as services are performed and accepted.

We allocate revenue on software transactions (referred to as “arrangements”) involving multiple elements to each element based on the respective fair values of the elements. Our determination of fair value of each element 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, recognize revenue from maintenance ratably over the maintenance term and recognize consulting revenues as the related services are performed.

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.* Our customary practice is to have a written contract, signed by both the customer and us, or a purchase order from those customers that have previously negotiated a standard end-user license arrangement or 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 software.
- *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 all 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 relating to maintenance services and arrangements that include rights to unspecified future technology.
- *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 and Goodwill.* 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 other intangibles. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant

negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining amortization period, we reduce the net carrying value of the related intangible asset to fair value and may adjust the remaining amortization period. Any such impairment charge could be significant and could have a material adverse effect on our reported financial statements. We did not record any impairment charges on our intangible assets during fiscal 2004. As of October 31, 2004, the carrying amount of our intangible assets, net was \$198.1 million.

We evaluate aggregate 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 assess 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 2004. As of October 31, 2004, the carrying amount of our goodwill was \$593.7 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, 2004, current deferred tax assets, net of current deferred tax liabilities totaled \$125.6 million. Non-current deferred tax assets, net of non-current deferred tax liabilities, totaled \$146.4 million. We believe it is more likely than not that our results of future operations will generate sufficient taxable income to utilize our net deferred tax assets. We consider future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for any valuation allowance, and if we determine we would not be able to realize all or part of our net deferred tax assets in the future, we would charge to income an adjustment to the deferred tax assets in the period we make that determination.

We provide for United States income taxes on the earnings of our foreign subsidiaries unless they are considered permanently invested outside of the United States. As of October 31, 2004, the cumulative amount of earnings upon which United States income taxes have not been provided was approximately \$36.3 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, 2004, our allowance for doubtful accounts was \$7.1 million.

## Results of Operations

### *Revenue Background*

We generate our revenue from the sale of software licenses, maintenance and professional services. As a result of the application of accounting rules and policies relating to revenue recognition, *orders* we receive for software licenses and services turn into *revenue* on our income statements at varying rates. In general, orders for software licenses turn to revenue either at the time the license is shipped (an “upfront license”), or ratably over the term of the license (a “time-based license”). Maintenance orders generally turn to revenue ratably over the maintenance period and professional service orders generally turn to revenue upon completion of contractually agreed upon milestones. A more complete description of our revenue recognition policies can be found above under *Critical Accounting Policies*.

Our *revenue* in any fiscal quarter is equal to the sum of our upfront license revenue, time-based license revenue, maintenance revenue and professional service revenue. *Upfront license revenue* generally depends on the volume of upfront license orders shipped during the quarter. *Time-based license revenue* in any quarter is derived almost entirely from TSL orders received and delivered in *prior* quarters; since our TSL orders generally yield revenue ratably over a typical term of three years, a given TSL order contributes to revenue in the quarter it is booked at most one-twelfth of its aggregate booking value. *Maintenance* revenue in any quarter is similarly derived largely from maintenance orders received in *prior* quarters since our maintenance orders generally yield revenue ratably over a typical term of one year. Finally, *Professional Service* revenue is also derived almost entirely from orders received in prior quarters, since we recognize revenue from professional services when those services are rendered, not when they are booked. Any order or portion thereof that does not turn to revenue in the quarter in which it is received is added to our backlog and generally recognized in future periods. The components of our aggregate backlog are discussed further under Part I, Item 1. *Business-Sales, Distribution and Backlog* above.

Given the different revenue impacts of upfront licenses and TSLs, in any given fiscal quarter, our license revenue is very sensitive to the mix of upfront and time-based licenses delivered during the quarter. A TSL order results in significantly *lower* current-period revenue than an equal-sized order for an upfront license. Conversely, a TSL order will result in *higher* revenue recognized in future periods than an equal-sized order for an upfront license. For example, on a \$120,000 order for an upfront license, we recognize \$120,000 of revenue in the quarter the product is shipped and no revenue in future quarters. On a \$120,000 order for a three-year TSL shipped on the last day of the quarter, we recognize no revenue in the quarter the product is shipped and \$10,000 in each of the twelve succeeding quarters. TSLs also shift maintenance revenue to time-based revenue since maintenance is included in TSLs.

### *License Order Mix*

Beginning in August 2000, when we adopted TSLs, we maintained a target license mix of approximately 75% TSLs and 25% upfront licenses, based on our expectations of total orders and our assessment of the demand for upfront licenses, which have more front-loaded payment terms than TSLs. From August 2000 through the fourth quarter of fiscal 2004, our average license mix has been 76% time-based licenses and 24% upfront licenses, although the license mix has varied considerably from quarter to quarter. Our license order mix for the last nine fiscal quarters is set forth below:

	<u>Q4- 2004</u>	<u>Q3- 2004</u>	<u>Q2- 2004</u>	<u>Q1- 2004</u>	<u>Q4- 2003</u>	<u>Q3- 2003</u>	<u>Q2- 2003</u>	<u>Q1- 2003</u>	<u>Q4- 2002</u>
Upfront licenses . . . . .	7%	20%	42%	57%	33%	21%	26%	15%	27%
Time-based license . . .	93%	80%	58%	43%	67%	79%	74%	85%	73%

The percentage of upfront licenses is driven by a number of factors, including the level of overall license orders, customer demand, preferred customer payment terms and requested customer ship

dates. The percentages in the third quarter of fiscal 2004 reflect both lower-than-expected upfront orders and a substantially lower-than-expected overall orders total.

As described above under “Fiscal 2004 Business Environment,” for the fourth quarter of fiscal 2004 and beyond, we have adjusted our target license mix from approximately 75% time-based licenses to an almost completely time-based license mix. The figures above for the fourth quarter of fiscal 2004 reflect this shift in our target license mix.

Our upfront and time-based license agreements sometimes provide the right to exchange a portion of the software initially subject to the license for other specified Synopsys products. The customer’s exchange of product, when so provided in the license agreement, does not alter the timing of recognition of the license fees paid by the customer. However, because in such cases the customer need not obtain a new license and pay an additional license fee for the use of the additional products, the use of these arrangements could result in reduced revenue compared to licensing the individual products separately.

#### *Orders*

Total orders in fiscal 2004 were \$956 million, a decrease from \$1,368 million in fiscal 2003. The decrease in orders reflects the trends and developments discussed above in “Fiscal 2004 Business Environment” and the timing of a major contract renewal, which was expected to occur during fiscal 2004, but which was not completed until the first quarter of fiscal 2005.

#### *Reported Revenue*

<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
(dollars in millions)						
\$1,092.1	\$1,177.0	\$906.5	\$(84.9)	(7)%	\$270.5	30%

The decrease in total revenue for fiscal 2004 compared to fiscal 2003 was due primarily to: (i) a lower level of orders than expected in fiscal 2004; (ii) our shift in the fourth quarter to an almost completely ratable license model; and (iii) a decrease in maintenance revenue. The increase in total revenue for fiscal 2003 compared to fiscal 2002 was primarily due to: (i) contribution of products from the Avant! acquisition, which was completed during the third quarter of fiscal 2002, for all of fiscal 2003; (ii) continued phase-in of the ratable license 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 yielding upfront revenue.

With our further shift in license mix beginning in the fourth quarter of fiscal 2004, we expect total reported revenue for the first three quarters and full fiscal year 2005 under the new more ratable model to be below the comparable periods in fiscal 2004.

#### *Time-Based Revenue*

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
(dollars in millions)							
	\$663.2	\$618.0	\$373.6	\$45.2	7%	\$244.4	65%
Percentage of total revenue . . . . .	61%	53%	41%				

Since we adopted a license mix of approximately 25% upfront and 75% TBLs in August 2000, our time-based revenue has grown in successive periods in both dollar and percentage terms as TBL orders

received each fiscal period contribute revenue that is “layered” over the revenue recognized from TBL orders received in prior periods. This effect repeats itself each period in varying degrees until the TBL model is fully phased in.

The increase in time-based revenue in fiscal 2004 compared to fiscal 2003 was primarily due to this continued phase-in of our ratable license model and to the full-year revenue contribution in fiscal 2004 from a strong level of time-based license orders received during fiscal 2003. The increase in time-based license revenue in fiscal 2003 compared to fiscal 2002 was similarly due primarily to the continued phase-in of the ratable license model and to the increased time-based license sales contributed by Avant! products during the full fiscal year 2003.

With our shift in the fourth quarter of fiscal 2004 to an almost completely ratable license model, we expect an additional phase-in period during which our time-based revenue should continue to increase in both dollar and percentage terms even if the overall level of TBL orders does not grow, and could grow even if the overall level of TBL orders in any period declines. Over the long term, as we complete this further transition, time-based revenue should more closely track average time-based orders trends.

#### *Upfront Revenue*

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
				(dollars in millions)			
	\$216.0	\$298.3	\$245.2	\$ (82.3)	(28)%	\$53.1	22%
Percentage of total revenue . . . . .	20%	25%	27%				

The decrease in upfront revenue for fiscal 2004 compared to fiscal 2003 was primarily due to the shift to a higher ratable license model in the fourth quarter of fiscal 2004 and to lower-than-expected upfront orders in the third quarter of fiscal 2004. Upfront license revenue for fiscal 2003 increased compared to fiscal 2002 primarily due to the contribution of Avant! products for the full 2003 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 yielding upfront revenue. The percentage of revenue comprised of upfront licenses declined over the three-year period due to the phasing in of our ratable license model begun in August 2000. With our further shift in license mix in the fourth quarter of fiscal 2004, we expect upfront revenue to significantly decrease in fiscal 2005 in both dollar and percentage terms.

#### *Service Revenue*

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
				(dollars in millions)			
Maintenance revenue . . . . .	\$170.1	\$220.1	\$232.7	\$ (50.0)	(23)%	\$ (12.6)	(5)%
Professional service and other revenue . . . . .	42.8	40.6	55.0	2.2	5%	(14.4)	(26)%
Total service revenue . . . . .	<u>\$212.9</u>	<u>\$260.7</u>	<u>\$287.7</u>	<u>\$ (47.8)</u>	<u>(18)%</u>	<u>\$ (27.0)</u>	<u>(9)%</u>
Percentage of total revenue . . . . .	19%	22%	32%				

Our maintenance fees have declined primarily due to our adoption of TSLs, which include maintenance with the license fee and thus contribute no separately recognized maintenance fees. Other

factors include the pricing of maintenance on perpetual license transactions above \$2 million, which is substantially lower than the rates on standard perpetual licenses, and non-renewal of maintenance by certain customers. With our license model shift, we expect more of our maintenance revenue to be included in our overall TSL revenue, and therefore for our separately recognized maintenance revenue to continue to decline.

Professional service fees grew approximately 5% from fiscal 2003 to fiscal 2004 as customers continued to use our professional services personnel to augment their internal staff and to assist in implementing their advanced IC designs. Professional service revenue decreased significantly from fiscal 2002 to fiscal 2003, reflecting reduced demand for turnkey chip design services.

During the third and fourth quarters of fiscal 2004, consulting capacity constraints and pricing pressure from customers and competitors constrained our professional service revenue growth. We expect these factors to continue to impact professional service revenue in fiscal 2005.

Service revenue, as a percentage of total revenue, has posted steady decreases over the past three years due primarily to the inclusion of maintenance services in TSLs described above.

*Orders and Revenue Seasonality.* Historically, our orders and revenue have been lowest in our first quarter and highest in our fourth quarter, with a material decline between the fourth quarter of one fiscal year and the first quarter of the next fiscal year, although the timing of major license renewals can alter this typical trend. In our license model, revenue seasonality has historically resulted principally from the decline in the amount of upfront orders from the fourth quarter of one fiscal year to the first quarter of the next fiscal year. Going forward, however, we expect our shift to an almost completely ratable license model will significantly reduce revenue seasonality.

*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), Design for Manufacturing and Professional Services & Other. The products and services in these groups are described in detail under Part I, Item 1. *Business*, above.

The following table summarizes the revenue attributable to these groups as a percentage of total revenue for the last eight 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 software maintenance revenue, which represented approximately 16% and 19% of our total revenue for fiscal 2004 and fiscal 2003, respectively, to the products to which those support services related. 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 grouping to provide a consistent presentation.

	<u>Q4- 2004</u>	<u>Q3- 2004</u>	<u>Q2- 2004</u>	<u>Q1- 2004</u>	<u>Q4- 2003</u>	<u>Q3- 2003</u>	<u>Q2- 2003</u>	<u>Q1- 2003</u>
Galaxy Design Platform . . . . .	60%	61%	64%	63%	62%	64%	70%	65%
Discovery Verification Platform . . . . .	21	21	20	21	22	20	19	22
IP . . . . .	6	7	6	6	7	8	5	6
Design for Manufacturing . . . . .	9	7	7	7	5	5	4	3
Professional Services & Other . . . . .	4	4	3	3	4	3	2	4
Total . . . . .	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

The respective revenue contributions from our different groups has been relatively stable over the eight-quarter period shown in the table above. This stability is principally due to the fact that most of our customers purchase multiple products from us, and do so under TSLs, for which revenue is recognized ratably over the term of the license. Accordingly, significant changes in revenue contribution

from different groups have been driven primarily by one-time events, such as acquisitions, or by the mix of upfront versus time-based orders received for certain products during a given quarter.

For example, our Galaxy Design Platform revenue as a percentage of total revenue increased in the second quarter of fiscal 2003 due to a number of large perpetual licenses with our Japanese customers, many of which included a disproportionate amount of products from the Galaxy Design Platform, yielding significant upfront revenue contributions from that product group for that quarter. Similarly, the percentage of revenue from our IP products rose significantly in the third quarter of fiscal 2003 as a result of increased sales of upfront IP licenses during that quarter.

While we expect our TSL licensing model will continue to lessen quarter-to-quarter variations in revenue in the near-term, we believe our IP and Design for Manufacturing products will, over time, account for increasing percentages of total revenue as a result of our customers' greater acceptance of and reliance upon pre-designed, pre-verified IP components and tools and technologies needed for the manufacture of very small geometry ICs.

### Events Affecting Cost of Revenues and Operating Expenses

*Temporary Shutdown of Operations.* As a cost saving measure, we temporarily shut down operations in North America for three days during the first quarter of fiscal 2004, four days during the third quarter of fiscal 2004 and four days during the third quarter of fiscal 2003, resulting in savings of approximately \$7.6 million in fiscal 2004 and \$4.8 million in fiscal 2003. Operations were not shut down for any days in fiscal 2002. The savings in fiscal 2004 and 2003 relate primarily to salaries and benefits and are reflected in our consolidated financial statements as follows:

	Year Ended October 31,	
	2004	2003
	(in thousands)	
Cost of revenue . . . . .	\$1,421	\$ 874
Research and development . . . . .	3,236	1,899
Sales and marketing . . . . .	2,038	1,344
General and administrative . . . . .	948	678
Total Savings . . . . .	<u>\$7,643</u>	<u>\$4,795</u>

*Workforce Reduction.* During the fourth quarter of 2004, the first quarter of fiscal 2003 and the second quarter of fiscal 2002 we reduced expenses by decreasing the number of employees in most departments in domestic and foreign locations. This workforce reduction affected approximately 84 employees in fiscal 2004 (50 employees in the U.S. and 34 employees outside the U.S.), 200 employees in fiscal 2003 (130 employees in the U.S. and 70 employees outside the U.S.) and 175 employees in fiscal 2002 (137 employees in the U.S. and 38 employees outside the U.S.), resulting in charges of approximately \$6.6 million in fiscal 2004, \$4.4 million in fiscal 2003 and \$3.9 million in fiscal 2002. The



charges in each fiscal year relate primarily to severance and other special termination benefits and are included in our consolidated financial statements as follows:

	Year Ended October 31,		
	2004	2003	2002
	(in thousands)		
Cost of revenue . . . . .	\$ 483	\$1,167	\$ 678
Research and development . . . . .	4,457	1,388	1,081
Sales and marketing . . . . .	1,230	1,239	1,078
General and administrative . . . . .	460	630	1,033
Total Charge . . . . .	<u>\$6,630</u>	<u>\$4,424</u>	<u>\$3,870</u>

*Workforce Realignment.* During the fourth quarter of fiscal 2003 and effective in the first quarter of fiscal 2004, we realigned our operations to focus resources on more strategic areas of investment and to become more operationally efficient. This realignment affected a total of 140 employees in the United States and 100 employees outside the United States, in most departments. Charges for severance and other termination benefits totaling \$14.9 million were reflected in our consolidated financial statements for fiscal 2003 as follows.

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

*Cost of Revenue*

	Year Ended October 31,			\$ Change 2003 to 2004	% Change 2003 to 2004	\$ Change 2002 to 2003	% Change 2002 to 2003
	2004	2003	2002				
	(dollars in millions)						
Percentage of total revenue . . . . .	\$257.1	\$240.3	\$173.2	\$16.7	7%	\$67.1	39%
	24%	20%	19%				

Cost of revenue includes personnel and related costs to provide product support, consulting services and training. Cost of revenue also includes software production costs, product packaging, documentation, amortization of capitalized software development costs, and amortization of core/developed technology and other intangible assets as described below. Management allocates these expenses, most of which are relatively fixed and do not fluctuate significantly with changes in revenue or license mix, to cost of upfront licenses, cost of time-based licenses and cost of services, based on the mix of orders booked within a given period.

The increase in cost of revenue in fiscal 2004 compared to fiscal 2003 was primarily due to: (i) an increase in amortization of \$9.7 million of core/developed technology recorded as a result of our acquisitions completed in fiscal 2003 and 2004; (ii) an increase of \$9.1 million in field support personnel costs due to targeted hiring in the customer support function; and (iii) increased human resources, technology and facilities costs of \$3.6 million as a result of the increase in cost of revenue headcount as a percentage of total headcount. This increase was partially offset by a decrease of

(i) \$1.1 million in consulting services; (ii) \$2.6 million as discussed above under *Workforce Realignment*; and (iii) \$1.1 million in royalty expense in fiscal 2004 compared to fiscal 2003. Total cost of revenue as a percentage of total revenue increased due to lower revenue during 2004 and increased amortization of intangible assets and deferred stock compensation from acquisitions in fiscal 2003.

The increase in cost of revenue in fiscal 2003 compared to fiscal 2002 was primarily due to: (i) an increase of \$58.9 million in amortization of intangible assets and deferred stock compensation recorded as a result of our acquisitions in fiscal 2003 and 2002; (ii) the cost of our realignment of operations totaling \$2.6 million as discussed above under *Workforce Realignment*; and (iii) additional royalties for in-licensed technology of \$1.5 million.

We expect cost of revenue, excluding amortization of intangible assets and deferred stock compensation allocated to this line item, to increase slightly in fiscal 2005 as a result of increased headcount from acquisitions during fiscal 2004 and higher targeted incentive compensation. We also expect cost of revenue as a percentage of revenue in fiscal 2005 to increase (and gross margin to decrease) due to the expected increase in cost of revenue described above and the expected decrease in revenue in fiscal 2005 compared to fiscal 2004.

See *Amortization of Intangible Assets and Deferred Stock Compensation* below for information regarding the amount of amortization charged to cost of revenue for the relevant periods.

## Operating Expenses

### *Functional Allocation of Operating Expenses*

Historically, we allocate certain human resource programs, information technology and facility expenses among our functional income statement categories based on headcount within the functional area. Annually, or upon a significant change in headcount (as in the case of a workforce reduction or realignment) and other factors, management reviews the allocation methodology and the expenses included in the allocation pool. Management conducted such a review with respect to Synopsys' workforce reductions in fiscal 2002 and 2003 and the workforce realignment in fiscal 2004 and with respect to additional expenses from certain worldwide IT and facility programs implemented during fiscal 2002. The resulting expense allocations generally contribute significantly to the fluctuations in functional area expenses from year to year.

### *Research and Development*

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2004	2003	2002	2003 to 2004		2002 to 2003	
				(dollars in millions)			
Percentage of total revenue . . .	\$285.3	\$285.9	\$225.5	\$ (0.6)	—	\$60.4	27%
	26%	24%	25%				

The slight decrease in research and development expense in fiscal 2004 compared to fiscal 2003 reflects an increase of \$10.1 million in research and development personnel and related costs as a result of increased investment in research and development activities, offset by: (i) decreased depreciation of \$2.2 million as a result of overall decreased capital spending and lower replacement costs compared to fiscal 2003; (ii) severance packages totaling \$1.4 million associated with our workforce reduction during fiscal 2003 which were not incurred during fiscal 2004; (iii) a decrease of \$1.6 million in consulting services compared to fiscal 2003; and (iv) a reduction of \$4.5 million in North America human resources, information technology and facilities costs allocated to research and development expenses as a result of the decrease in research and development headcount as a percentage of total headcount.

The increase in research and development expense in fiscal 2003 compared to fiscal 2002 was primarily due to increases of: (i) \$30.7 million in research and development personnel and related costs as a result of acquisitions in fiscal 2002 and 2003, including additional employer payroll taxes incurred as a result of stock option exercises during fiscal 2003; (ii) \$22.2 million in increased human resources, information technology and facilities costs allocated to research and development as a result of the increase in research and development headcount as a percentage of total headcount; and (iii) \$6.3 million as a result of our realignment of operations as discussed above under *Workforce Realignment*. This increase was partially offset by a decrease in depreciation expense of \$2.8 million as a result of capital expenditure control measures implemented in fiscal 2003 and \$2.3 million in consulting services incurred in fiscal 2002 that were not incurred in fiscal 2003.

We expect research and development expense to increase slightly in fiscal 2005 as a result of increased headcount from acquisitions during fiscal 2004 and higher targeted incentive compensation. We also expect research and development expense as a percentage of revenue to increase due to the expected increase in research and development expense described above and the expected decrease in revenue in fiscal 2005 compared to fiscal 2004.

### *Sales and Marketing*

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
				(dollars in millions)			
Percentage of total revenue . . .	\$302.4	\$310.7	\$264.8	\$(8.3)	(3)%	\$45.9	17%
	28%	26%	29%				

The decrease in sales and marketing expense in fiscal 2004 compared to fiscal 2003 was primarily due to: (i) a reduction of \$4.0 million in variable compensation, driven by reduced orders and shipments in fiscal 2004; (ii) a reduction of \$3.0 million in sales and marketing personnel and related costs as a result of decreased headcount due to previous workforce reductions and realignments; and (iii) \$4.8 million recorded in the fourth quarter of fiscal 2003 as a result of our realignment of operations as discussed above under *Workforce Realignment*. This decrease is partially offset by increases of (i) \$4.4 million in human resources, information technology and facilities costs allocated to sales and marketing expenses as a result of the increase in sales and marketing headcount as a percentage of total headcount and (ii) \$1.2 million related to expanded marketing efforts and charges associated with the cancellation of certain employee-related functions.

The increase in sales and marketing expense in fiscal 2003 compared to fiscal 2002 was primarily due to: (i) \$42.4 million in additional sales and marketing personnel and related costs as a result of acquisitions in fiscal 2002 and 2003, including additional employer payroll taxes incurred as a result of stock option exercises during fiscal 2003, offset by savings from a four-day shutdown of operations in North America; (ii) \$4.8 million as a result of realignment charges as discussed above under *Workforce Realignment*; and (iii) \$2.7 million in additional travel expenses related to sales efforts. These increases were partially offset by a decrease of \$3.8 million in human resources, technology and facilities costs allocated to sales and marketing expenses as a result of a decrease in sales and marketing headcount as a percentage of total headcount.

We expect sales and marketing expense to increase slightly in fiscal 2005 as a result of increased headcount from acquisitions during fiscal 2004 and higher targeted incentive compensation. We also expect sales and marketing expense as a percentage of revenue to increase due to the expected increase in research and development expense and the expected decrease in revenue in fiscal 2005 compared to fiscal 2004.

*General and Administrative*

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
				(dollars in millions)			
Percentage of total revenue . . . .	\$121.5	\$90.0	\$78.5	\$31.5	35%	\$11.5	15%
	11%	8%	9%				

The increase in general and administrative expense in fiscal 2004 compared to fiscal 2003 was primarily due to: (i) the \$10.0 million termination fee paid to Monolithic System Technology, Inc. (MoSys) in connection with termination of the acquisition agreement in April 2004 and professional service fees of \$5.4 million relating to that transaction and the subsequent litigation; (ii) an increase of \$5.0 million in professional service fees relating to other litigation matters; (iii) \$4.7 million in facilities costs primarily related to planned facilities consolidation in fiscal 2004; (iv) a loss of \$1.1 million related to the sublease of a portion of our Ireland headquarter facility; and (v) a \$3.5 million increase in depreciation due to increased capital spending in information technology. This increase was partially offset by a decrease of \$3.5 million in human resources, information technology and facilities costs reported under this line item as a result of a decrease in general and administrative headcount as a percentage of total headcount.

The increase in general and administrative expense in fiscal 2003 compared to fiscal 2002 was primarily due to: (i) \$12.8 million in additional general and administrative personnel and related costs as a result of acquisitions in fiscal 2002 and 2003, including additional employer taxes incurred as a result of stock option exercises during fiscal 2003; (ii) \$7.0 million increase in depreciation as a result of upgrades to our information technology infrastructure; (iii) an increase of \$5.7 million in facilities costs allocated to general and administrative expense due to new leases during the current year and the expiration of a sublease on one of Synopsys' buildings in June 2003; (iv) an increase of \$3.7 million in professional services costs, patent prosecution expenditures and litigation; (v) an increase of \$2.8 million in maintenance agreements covering software and computing equipment obtained in acquisitions during fiscal 2002 and 2003; and (vi) \$1.2 million related to the realignment of operations as discussed above under *Workforce Realignment*. These increases were partially offset by decreases of (i) \$14.2 million in human resources, technology and facilities costs allocated 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 reduction of \$6.6 million in bad debt expense as accounts receivable aging improved from fiscal 2002.

We expect general and administrative expense to be flat or decrease slightly in fiscal 2005 as a result of continuing cost controls and the absence of certain one-time charges such as those associated with the MoSys transaction, partially offset by higher targeted incentive compensation. However, we expect general and administrative expense as a percentage of revenue to increase due to the expected decrease in revenue in fiscal 2005 compared to fiscal 2004.

*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 expensed 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) \$10.7 million related to severance costs for Synopsys employees who were terminated and costs associated with transition employees as a result of the fiscal 2002 mergers; (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) \$3.1 million of other expenses including travel and certain professional fees related to the fiscal 2002 mergers.

#### *In-Process Research and Development*

In fiscal 2004 purchased in-process research and development (IPRD) was \$1.6 million and represents in-process technologies associated with a fourth quarter acquisition considered immaterial for financial statement purposes. Purchased IPRD of \$19.8 million and \$87.7 million in fiscal 2003 and 2002, respectively, represents in-process technologies associated with our acquisitions of Numerical in fiscal 2003 and Avant! and inSilicon in fiscal 2002. At the date of each acquisition, the projects associated with the IPRD efforts had not yet reached technological feasibility and the research and development in process had no alternative future uses. Accordingly, these amounts were charged to expense on the respective acquisition date of each of the acquired companies.

*Valuation of IPRD.* The value assigned to acquired in-process technology is determined by identifying products under research in areas for which technological feasibility had not been established as of the acquisition date. The value of in-process technology is then 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, sales 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 software were completed in fiscal 2003. Our Cadabra® product 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 were integrated with other Synopsys products during fiscal 2004. Expenditures to complete Numerical's acquired in-process technologies approximated the original estimates.

*inSilicon.* On September 20, 2002, we acquired inSilicon, a leading provider of connectivity semiconductor IP used by semiconductor and systems companies to design SoCs 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 discontinue the DELA project. PCI Express and USB PHY have been completed. Expenditures to complete inSilicon's acquired in-process technologies approximated 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> (in thousands)	<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%
			not
Logical Products Division (LPD) . . . . .	\$ 1,400	90%	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 the contract rights intangible associated with certain executory contracts, core/developed technology, trademarks, trade names, customer relationships, covenants not to compete and other intangibles acquired in business combinations completed during fiscal 2002, 2003 and 2004. Intangible assets are amortized on a straight-line basis over their useful lives, which range from three to ten years. Deferred stock compensation represents the intrinsic value of unvested stock options assumed in connection with prior year acquisitions. The deferred stock compensation is amortized over the options' remaining vesting period of one to three years. Generally, amortization of deferred stock compensation will decrease over time as the assumed stock options vest, although employee terminations affect the exact timing and

amount of future amortization of deferred stock compensation. Amortization expense for these assets is included in the consolidated statements of operations as follows:

	<u>Year Ended October 31,</u>			<u>\$ Change</u>	<u>% Change</u>	<u>\$ Change</u>	<u>% Change</u>
	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2003 to 2004</u>		<u>2002 to 2003</u>	
	(dollars in millions)						
Included in cost of							
revenue . . . . .	\$102.6	\$ 92.9	\$ 33.9	\$ 9.7	10%	\$59.0	174%
Included in operating							
expenses . . . . .	34.9	35.3	28.6	(0.4)	(1)%	6.7	23%
Total . . . . .	<u>\$137.5</u>	<u>\$128.2</u>	<u>\$ 62.5</u>	<u>\$ 9.3</u>	7%	<u>\$65.7</u>	105%
Percentage of total							
revenue . . . . .	13%	11%	7%				

The increase in amortization of intangible assets and deferred compensation in fiscal 2004 compared to fiscal 2003 is primarily due to additional amortization of assets acquired in the Numerical acquisition in the second quarter of fiscal 2003 partially offset by the declining amounts of amortization related to deferred compensation recorded in prior year acquisitions. See Note 4 to *Notes to Audited Consolidated Financial Statements* for a schedule of future amortization amounts.

The increase in amortization of intangible assets and deferred compensation in fiscal 2003 compared to fiscal 2002 is primarily due to fiscal 2003 and 2002 acquisitions, particularly Avant!, partially offset by a \$16.2 million decrease in goodwill amortization as a result of the adoption of SFAS 142 on November 1, 2002 under which goodwill is no longer amortized.

*Impairment of Intangible Assets.* There were no material impairment charges related to intangible assets during fiscal 2004 and 2003.

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 the Route Compiler 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.

*Expensing of Stock Awards.* In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R), which will be effective in the fourth quarter of fiscal 2005. SFAS 123R will result in our recognition of substantial compensation expense relating to our employee stock options and employee stock purchase plans. Synopsys currently uses the intrinsic value method to measure compensation expense for stock-based awards to its employees. Under this standard, we generally do not recognize any compensation related to stock option grants we issue under our stock option plans or related to the discounts we provide under our employee stock purchase plans. Under the new rules, we are required to adopt a fair-value-based method for measuring the compensation expense related to employee stock awards; this will lead to substantial additional compensation expense and therefore will have a material adverse effect on our reported results of operations. Note 2 to our Consolidated Financial Statements provides our pro forma net income and earnings per share as if we had used a fair-value-based method similar to the methods required under SFAS 123R to measure the compensation expense for employee stock awards during fiscal years 2004, 2003 and 2002.

## Operating Margin

Our operating margin declined from approximately 17% in fiscal 2003 to approximately 8% in fiscal 2004, primarily due to the decrease in revenue year over year. As a result of the expected decrease in revenue in fiscal 2005 compared to fiscal 2004 and the expected increase in overall operating expenses described above, we expect our operating margin in fiscal 2005 to be meaningfully lower than in fiscal 2004.

## Other Income (Expense), Net

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2004	2003	2002	2003 to 2004		2002 to 2003	
(dollars in millions)							
Interest income, net . . . . .	\$ 6.0	\$ 3.5	\$ 8.2	\$ 2.5	71%	\$ (4.7)	(57)%
Gain (loss) on sale of investments, net of investment write-downs . . . . .	(1.7)	16.4	12.9	(18.1)	(110)%	3.5	27%
Other . . . . .	(2.0)	4.2	(229.7)	(6.2)	(148)%	233.9	102%
Total . . . . .	<u>\$ 2.3</u>	<u>\$24.1</u>	<u>\$(208.6)</u>	<u>\$(21.8)</u>	<u>(90)%</u>	<u>\$232.7</u>	<u>112%</u>

The decrease in other income (expense) in fiscal 2004 compared to fiscal 2003 was primarily due to reduced investment gains and reduced rental income. The increase in 2003 compared to 2002 was primarily due to the \$240.8 million expense in 2002 related to the settlement of the Cadence Design Systems, Inc. (Cadence) litigation.

## Liquidity and Capital Resources

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, cash equivalents and short-term investments decreased \$119.4 million, or 17%, to \$579.0 million as of October 31, 2004 from \$698.4 million as of October 31, 2003.

Cash provided by operations was \$264.0 million in fiscal 2004 compared to \$391.5 million in fiscal 2003. The decrease in cash from operations was driven in part by lower orders and reported revenues in fiscal 2004, as well as by increased use of operating cash as follows: (i) cash disbursements for foreign income taxes of approximately \$44.7 million; (ii) payment of \$15.4 million for the MoSys acquisition agreement termination fee and associated litigation costs; (iii) disbursements associated with our fiscal 2003 workforce realignment of approximately \$15 million; (iv) payments of international value added taxes of approximately \$8 million; and (v) increased prepaid maintenance contract expenses for our design and information systems electronic infrastructure. These uses of cash were partially offset by income tax refunds of \$28.6 million.

Accounts receivable, net of allowances, decreased \$68.7 million, or 34%, to \$132.3 million as of October 31, 2004 from \$201.0 million as of October 31, 2003. Days sales outstanding (DSO), calculated based on revenue for the most recent quarter and accounts receivable as of the balance sheet date, decreased to 53 days as of October 31, 2004 from 58 days as of October 31, 2003. The decrease in accounts receivable and DSO was attributable to a \$100.7 million reduction in new billings caused by lower orders during fiscal 2004 and longer customer payment terms compared to fiscal 2003, partially offset by a \$39.0 million decrease in collections compared to the prior fiscal year.

Cash provided by operations is in part dependent upon the payment terms on our license agreements. For an upfront license, we require that at least 75% of the license fee be paid within the first year. Conversely, payment terms for time-based licenses are generally extended; typically the license fee is paid quarterly in even increments over the term of the license. Accordingly, we generally



receive cash from upfront licenses sooner than on time-based licenses. Our lower-than-expected level of up-front orders in the third quarter of fiscal 2004 and further transition to an almost completely ratable license model beginning in the fourth quarter of fiscal 2004 reduced our cash flow from operations for fiscal 2004; we expect this further transition to continue to adversely affect cash flow from operations during fiscal 2005.

Cash used in investing activities was \$172.0 million in fiscal 2004 compared to \$258.3 million in fiscal 2003. The decrease of \$86.3 million is primarily due to a substantial decrease of cash used for acquisitions and decreased proceeds from the sale of long-term investments.

Cash used in financing activities was \$266.6 million in fiscal 2004 compared to cash provided by financing activities of \$74.2 million in fiscal 2003. The decrease of \$340.8 million is primarily due to a decrease in proceeds of \$178.2 million from the sale of shares pursuant to our employee stock option plans and stock purchase plans during fiscal 2004 and increased purchases of treasury stock of \$162.6 million.

We hold our cash, cash equivalents and short-term investments in the United States and in foreign accounts, primarily in Ireland, Bermuda, and Japan. As of October 31, 2004, we held an aggregate of \$202.6 million in cash, cash equivalents and short-term investments in the United States and an aggregate of \$376.4 million in foreign accounts. Funds in foreign accounts are generated from revenue outside North America. With the exception of Japan, we currently maintain a policy under APB 23, *Accounting for Income Taxes-Special Areas*, of permanently reinvesting such funds outside of the United States.

In April 2004, we entered into a three-year, \$250.0 million senior unsecured revolving credit facility. This facility contains financial covenants requiring us to maintain a minimum leverage ratio and specified levels of cash, as well as other non-financial covenants. The facility terminates on April 28, 2007. Borrowings under the facility bear interest at the greater of the administrative agent's prime rate or the Federal funds rate plus 0.50%; however, we have the option to pay interest based on the outstanding amount at eurodollar rates plus a spread between 0.80% and 1.125% based on a pricing grid tied to a financial covenant. In addition, commitment fees are payable on the facility at rates between 0.20% and 0.25% per annum based on a pricing grid tied to a financial covenant. In April 2004, we borrowed and repaid \$200 million under the credit facility. As of October 31, 2004, we had no outstanding borrowings under the credit facility and we were in compliance with all covenants.

In November 2004, Synopsys completed its acquisition of ISE for cash consideration of \$100 million.

On November 30, 2004, Synopsys signed a merger agreement to acquire Nassda Corporation in an all-cash transaction for a purchase price of \$7.00 per share. The aggregate consideration is approximately \$192 million. At September 30, 2004, Nassda reported cash, cash equivalents and short-term investments of \$101.4 million. The transaction is subject to customary regulatory approvals and other closing conditions. In addition, the approval of Nassda's stockholders holding a majority of the outstanding shares of Nassda common stock and approval of the holders of a majority of the outstanding shares of Nassda common stock casting votes affirmatively or negatively on the merger agreement (excluding Nassda's officers and directors, the individual defendants and the related parties of the individual defendants) is required for Nassda and Synopsys to complete the proposed merger. Certain directors, officers and employees of Nassda who own in the aggregate approximately 60% of Nassda's outstanding common shares have agreed to vote in favor of the adoption and approval of the merger agreement. Upon the closing of the acquisition, the Nassda officers, directors and employees who are defendants in the litigation between Synopsys and Nassda will make settlement payments to Synopsys in the aggregate amount of approximately \$61 million.

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.

### Contractual Obligations Table

The following table summarizes our significant contractual obligations as of October 31, 2004. This table excludes amounts already recorded on our balance sheet as current liabilities as of October 31, 2004.

	<u>Total</u>	<u>Fiscal 2005</u>	<u>Fiscal 2006/ Fiscal 2007</u>	<u>Fiscal 2008/ Fiscal 2009</u>	<u>Thereafter</u>
			(in thousands)		
Long-Term Debt(1) . . . . .	\$ 1,310	\$ 560	\$ 750	\$ —	\$ —
Operating Lease Obligations(2) . . . . .	252,598	35,931	56,824	45,379	114,464
Purchase Obligations(3) . . . . .	14,539	7,033	7,506	—	—
Total Commitments . . . . .	268,447	43,524	65,080	45,379	114,464
Long-term liabilities on Balance Sheet(4) . . . . .	7,443	324	5,644	101	1,374
Total(5)(6) . . . . .	<u>\$275,890</u>	<u>\$43,848</u>	<u>\$70,724</u>	<u>\$45,480</u>	<u>\$115,838</u>

- (1) This commitment relates to the fees associated with the revolving credit facility. Additional information is provided in Note 5 of our Consolidated Financial Statements.
- (2) Operating lease obligations are net of sublease payments to be received. Additional information is provided in Note 6 of our Consolidated Financial Statements.
- (3) Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the course of business for which we have not received the goods or services as of October 31, 2004. Although open purchase orders are considered enforceable and legally binding, the terms generally allow us the option to cancel, reschedule and adjust our requirements based on our business needs prior to the delivery of goods or performance of services.
- (4) Does not include \$750,000 of interest payable for bond payable through September 2023. Additional information is provided in Note 5 of our Consolidated Financial Statements. Certain long-term liabilities reflected on our balance sheet, such as unearned revenue, are not presented in this table because they do not require cash settlement in the future.
- (5) We made or are committed to making additional cash expenditures in fiscal 2005 related to business combination transactions; specifically, \$95 million related to the acquisition of ISE, net of cash held by ISE, which was paid in November 2004, and approximately \$192 million related to the acquisition of Nassda Corporation, which transaction has not closed. Additional information is provided in Note 13 of our Consolidated Financial Statements. These acquisition payments are not included in the table above.
- (6) We are obligated under the contingent consideration provisions related to certain fiscal 2004 business combination transactions to make cash payments of up to \$15.0 million through fiscal 2007 if certain technology and performance milestones are achieved. Additional information is provided in Note 3 of our Consolidated Financial Statements. In addition, in connection with the ISE acquisition, which occurred in November 2004, we are obligated to make additional cash payments of up to \$20.0 million through fiscal 2007 if certain performance milestones are achieved. Additional information is provided in Note 13 of our Consolidated Financial Statements. The contingent consideration payments are not included in the table above.

The expected timing of payment of the obligations discussed above is estimated based on current information. Timing of payment and actual amounts paid may be different depending on the time of

receipt of goods or services or changes to agreed-upon amounts for some obligations. Amounts disclosed as contingent or milestone-based obligations are dependent on the achievement of the milestones or the occurrence of the contingent events and can vary significantly.

### **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 employees and consultants, excluding non-employee directors 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, 2004, 8,284,470 stock options remain outstanding and 7,128,810 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 and consultants, excluding executive officers and directors. 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 seven to ten years from the date of grant. As of October 31, 2004, 26,150,004 stock options remain outstanding and 5,460,416 shares of common stock were reserved for future grants under this plan.

Under our 1994 Non-Employee Directors Stock Option Plan (the Directors Plan), 2,100,000 shares were authorized for issuance. The Directors Plan provided 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 was not less than 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 elected 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 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, assuming continued board or committee service through such date. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants were prorated based upon the amount of time since the last annual meeting. The Directors Plan expired as to future grants in October 2004; as of October 31, 2004, 1,297,660 stock options remain outstanding. With the expiration of the Directors Plan, we expect to seek stockholder approval of a new plan for non-employee directors at our 2005 annual meeting of stockholders.

We have assumed certain option plans in connection with acquisitions. 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 2.2% and 0.9% for fiscal 2004 and 2003, respectively.

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

	<u>Year Ended October 31,</u>	
	<u>2004</u>	<u>2003</u>
Total grants, net of returns and cancellations, during the period as percentage of outstanding shares exclusive of options assumed in acquisitions . . . . .	2.2%	0.9%(1)
Grants to named executive officers, as defined below, during the period as a percentage of total options granted(2) . . . . .	3.8%	8.4%
Grants to named executive officers during the period as a percentage of outstanding shares(2) . . . . .	0.1%	0.2%
Total outstanding options held by named executive officers as a percentage of total options outstanding(2) . . . . .	17.9%	16.7%

- (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 included in the calculation, the net grants for fiscal 2003 as a percentage of outstanding shares would have been 1.4%.
- (2) Calculations based on named executive officers for each fiscal year.

A summary of our option activity and related weighted-average exercise prices for fiscal 2004 is as follows:

	<u>Shares Available for Options</u>	<u>Options Outstanding</u>	
		<u>of Number Shares</u>	<u>Weighted- Average Exercise Price</u>
	<u>(in thousands, except per share amounts)</u>		
Balance at October 31, 2003 . . . . .	15,770	42,119	\$21.89
Grants . . . . .	(5,143)	5,143	\$23.79
Exercises . . . . .	—	(6,559)	\$19.41
Cancellations . . . . .	1,877	(2,175)	\$24.45
Additional shares reserved . . . . .	300	—	—
Cancellation of Shares Reserved(1) . . . . .	(215)	—	—
Balance at October 31, 2004 . . . . .	<u>12,589</u>	<u>38,528</u>	\$22.42

- (1) Shares remaining available for grant under the Directors Plan on the date of expiration of such plan.

For additional information regarding our stock option activity during fiscal 2004, 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, 2004 is as follows:

	Exercisable		Unexercisable		Total	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
(in thousands, except per share amounts)						
In-the-Money . . . . .	5,757	\$14.90	2,077	\$14.51	7,834	\$14.80
Out-of-the-Money(1) . . . . .	22,254	\$23.91	8,440	\$25.56	30,694	\$24.36
Total Options Outstanding . . . . .	28,011	\$22.06	10,517	\$23.37	38,528	\$22.42

(1) Out-of-the-money options are those options with an exercise price equal to or above the closing price of \$16.24 on October 29, 2004, the last trading day of fiscal 2004.

The following table sets forth further information regarding individual grants of options during fiscal 2004 to the Chief Executive Officer and each of the other four most highly compensated executive officers (named executive officers) serving as such on October 31, 2004 whose compensation earned during fiscal 2004 exceeded \$100,000. We refer to these individuals as named executive officers.

Name	Individual Grants			Expiration Date	Potential Realizable Value At Assumed Annual Rates Of Stock Price Appreciation For Option Term(3)	
	Number of Securities Underlying Options Granted(1)	Percent of Total Options Granted to Employees(2)	Exercise Prices (\$/Share) (\$/Share)		5%	10%
					Aart J. de Geus . . . . .	26,800
	11,700	0.24%	\$29.88	02/24/14	\$219,859	\$ 557,166
	9,300	0.19%	\$29.87	05/26/14	\$174,701	\$ 442,727
Chi-Foon Chan . . . . .	22,600	0.46%	\$32.67	12/10/13	\$464,339	\$1,176,727
	9,600	0.19%	\$29.88	02/24/14	\$180,397	\$ 457,162
	7,700	0.16%	\$29.87	05/26/14	\$144,645	\$ 366,559
Vicki L. Andrews . . . . .	22,300	0.45%	\$32.67	12/10/13	\$458,176	\$1,161,107
	8,000	0.16%	\$29.88	02/24/14	\$150,331	\$ 380,968
	8,000	0.16%	\$29.87	05/26/14	\$150,281	\$ 380,841
Raul Camposano . . . . .	10,600	0.21%	\$32.67	12/10/13	\$217,787	\$ 551,916
	5,400	0.11%	\$29.88	02/24/14	\$101,473	\$ 257,154
	5,000	0.10%	\$29.87	05/26/14	\$ 93,925	\$ 238,025
Antun Domic . . . . .	24,350	0.49%	\$32.67	12/10/13	\$500,295	\$1,267,845
	7,100	0.14%	\$29.88	02/24/14	\$133,419	\$ 338,109
	8,000	0.16%	\$29.87	05/26/14	\$150,281	\$ 380,841

- (1) 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 approximately 4.9 million shares subject to options granted to employees under Synopsys' option plans during fiscal 2004 and excluding approximately 200,000 shares subject to options granted to non-employee directors during fiscal 2004.

- (3) In accordance with the rules of the SEC, the columns referring to potential realizable value show the gains or “option spreads” that would exist for the options granted based on the assumed rates of annual compound stock price appreciation of 5% and 10% from the date the option was granted over the full option term. These estimated rates do not represent our estimate or projection of future common stock prices or of the gains that may actually be realized by the optionee.

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, 2004:

Name	Shares Acquired On Exercise	Value Realized(1)	Number of Securities Underlying Unexercised Options at October 31, 2004		Value of In-the-Money Options at October 31, 2004(2)	
			Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable	Exercisable/Unexercisable
Aart J. de Geus . . . . .	162,000	\$3,946,623	3,249,530	198,270	\$ 87,400	N/A
Chi-Foon Chan . . . . .	213,306	\$3,709,529	1,927,540	175,704	\$127,746	N/A
Vicki L. Andrews . . . . .	94,800	\$1,286,321	287,595	135,855	\$ 4,600	N/A
Raul Camposano . . . . .	100,000	\$1,479,450	492,929	58,621	\$ 1,150	N/A
Antun Domic . . . . .	33,733	\$ 516,867	270,472	106,295	\$ 2,492	N/A

- (1) Market value at exercise less exercise price.
- (2) Market value of underlying securities as of October 29, 2004 (\$16.24) minus the exercise price. None of the unexercisable options held by the named executive officers on October 31, 2004 were in-the-money.

The following table provides information regarding our equity compensation plans as of October 31, 2004:

Plan Category	Number of Shares to be Issued Upon Exercise of Outstanding Options	Weighted-Average Exercise Price of Outstanding Options	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Shares Reflected in Column(a))
	(a)	(b)	(c)
(in thousands, except price per share amounts)			
Employee Equity Compensation Plans			
Approved by Stockholders(1) . . . . .	9,582	\$22.60	13,064
Employee Equity Compensation Plans Not			
Approved by Stockholders(2) . . . . .	26,150	\$22.53	5,460
Total . . . . .	<u>35,732(3)</u>	\$22.55	<u>18,524(4)</u>

- (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, 2004, a total of 2.8 million shares of our common stock were issuable upon exercise of such outstanding options.
- (4) Comprised of (i) 7.1 million shares remaining available for issuance under the 1992 Plan, (ii) 5.5 million shares remaining available for issuance under the 1998 Plan and (iii) 5.9 million shares remaining available for issuance under the Employee Stock Purchase Plans as of October 31, 2004. No shares remain available for grant under the Directors Plan, which expired in October 2004.

### **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 2004, 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;
2. International tax compliance services relating to certain foreign subsidiaries; and
3. Due diligence services relating to proposed acquisitions.

### **Factors That May Affect Future Results**

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

We generate substantially all of our revenue from the semiconductor and electronics industries. Beginning in late calendar 2000, the semiconductor industry entered its steepest and longest downturn of the past 20 years. According to the Semiconductor Industry Association (SIA), the semiconductor industry grew by 18% in 2003 and is expected to grow approximately 29% in 2004. Historically, growth in semiconductor sales has been followed by growth in semiconductor R&D spending, which in turn has led to growth in EDA expenditures. However, to date, EDA industry revenue has not tracked the recovery in semiconductor sales and more moderate increases in R&D spending, and current SIA reports forecast flat semiconductor sales in 2005. These factors adversely affected our results of operations during fiscal 2004 and may continue to adversely affect our results of operations into fiscal 2005.

We believe that, over the long term, growth in EDA spending will continue to depend on growth in semiconductor R&D spending and of the overall semiconductor market. However, we cannot predict the timing or magnitude of growth in semiconductor revenues, R&D spending or spending on EDA products, nor whether we will benefit from any such increases should they occur. If such growth does not occur or if we do not benefit from any such increases, our business, operating results and financial condition will continue to be materially and adversely affected.

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

SoC and IC functionality continues to increase while feature widths decrease, in turn substantially increasing the complexity, cost and risk of IC design and manufacturing. To address greater complexity, semiconductor designers and manufacturers demand continuous innovation from EDA suppliers, including Synopsys. At the same time, as a result of pricing pressure on their own products and the 2000-2002 downturn, customers and potential customers also seek to buy more products from fewer suppliers and at reduced overall prices in an effort to reduce cost and risk. In order to succeed in this environment, we must successfully address our customers' demands for significant R&D investments by us to meet their technology requirements, while also striving to reduce their overall costs. Failure to manage successfully these conflicting demands would materially and adversely affect our financial condition and results of operations.

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

The 2000-2002 downturn, the increasing complexity of SoCs and ICs, and customers' concerns about managing cost and risk have also led to the following potentially long-term negative trends:

- The number of starts of new IC designs has declined. New IC design starts are a key driver of demand for EDA software.
- Fewer new companies engaged in semiconductor design are being formed or funded, and demand from existing small and medium-sized semiconductor companies has been soft. These companies have traditionally been an important source of new business for us. As a result, we have become more reliant on our established customer base for new orders.
- 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 and services, and in some cases, increase customers' bargaining power in negotiations with their suppliers, including Synopsys.
- Industry changes, plus the cost and complexity of IC design, may be leading some companies in these industries to limit their design activity in general, to focus only on one discrete phase of the design process while outsourcing other aspects of the design, or to design using Field Programmable Gate Arrays (FPGAs), an alternative chip technology.

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

*The EDA industry is highly competitive, and competition may have a material adverse effect 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, such as Magma Design Automation, Inc., which has grown rapidly in recent years and gained a meaningful position in one of our core segments. We also compete with customers' internally developed design tools and capabilities. If we fail to compete effectively, our business will be materially and adversely affected.

We compete principally on technology leadership, product quality and features (including ease-of-use), time-to-results, post-sale support, interoperability with our own and other vendors' products, price and payment terms. Additional competitive challenges include the following:

- 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.
- To compete effectively, we believe we must offer products that provide both a high level of integration into a comprehensive platform and a high level of individual product performance. Doing so requires significant engineering and development work. We can provide no assurance that we will be able to continue offering complete design flows in configurations our customers will find more attractive than our competitors' offerings or that our efforts to balance the interests of integration versus individual product performance will be successful.
- Our major initiatives face intense competition and in some cases address emerging markets. We are investing significant resources into further development of the Galaxy Design Platform,



integration of the Discovery Verification Platform and enhancement of its System Verilog features and development of our DFM and IP portfolios. It is difficult for us to predict the success of these initiatives. If we fail to expand revenue from our new initiatives at the desired rate, our business, results of operations and financial condition would be materially and adversely affected.

- Price is an important competitive factor. Customers require a mix of price and tool performance that suits their needs; in some cases this may lead them to choose vendors based on price more than performance. In certain situations we must offer substantial discounts on our products due to competitive factors. As a result, average prices for our products may decline. Alternatively, we may lose potential business to a lower price competitor. In either case, our business, operating results and financial condition could be materially and adversely affected.
- Payment terms are also an important competitive factor and are aggressively negotiated by our customers. During the second half of fiscal 2003 and continuing through 2004, payment terms on time-based licenses lengthened compared to prior periods, negatively affecting our cash flow from operations. In addition, customers' reluctance to agree to the payment terms required under our upfront licenses negatively impacted our revenue for the third fiscal quarter of fiscal 2004, and was a primary factor in our decision to shift our target license mix to an almost completely ratable business model. Since cash is collected sooner on an upfront license than on a time-based license, the shift in our license mix towards more time-based licenses will adversely affect our cash flow in fiscal 2005.

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

Many factors affect our revenue and earnings, including customer demand, license mix and the timing of revenue recognition on products and services sold, making it difficult to predict revenue and earnings for any given fiscal period. Accordingly, stockholders should not view our historical results as necessarily indicative of our future performance. As demonstrated following our third fiscal quarter of 2004 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:

- Beginning in the fourth quarter of fiscal 2004, we shifted our target license mix to consist almost entirely of time-based licenses. Time-based licenses yield less current period revenue and more future period revenue than upfront licenses. The license mix shift decreased revenue for fiscal 2004 and will result in year-over-year declines in revenue during each of the first three quarters of fiscal 2005, and lower revenue for the full fiscal 2005 than in fiscal 2004.
- Our revenue and earnings targets over a number of fiscal periods assume a certain level of orders and a certain mix between upfront and time-based licenses. The amount of orders received and changes in the mix due to customer requirements, application of accounting rules regarding revenue recognition and competitive pressures could have a material adverse effect on our revenue and earnings. For example, if we ship more upfront licenses than expected during any given fiscal period, our revenue and earnings for that period could be above our targets even if orders are below target; conversely, if we ship fewer upfront licenses than expected our revenue and earnings for that period could fall below our targets even if orders meet or even exceed our target. Similarly, if we receive a lower-than-expected level of TBL orders during a given period, our revenue in future periods could be negatively affected.

- Under certain circumstances, we provide customers with the right to exchange a portion of the software they initially license for other specified Synopsys products. For example, a customer may use our front-end design products for a portion of the term of its license and then exchange such products for back-end placement software for the remainder of the term in order to complete the customer's IC design. While this practice helps assure the customer's access to the complete design flow needed to manufacture its product, use of these arrangements could result in reduced revenue compared to licensing the individual tools separately without exchange rights.
- In the past, we have regularly received a significant proportion of our orders for a given quarter in the last one or two weeks of the quarter. The delay of one or more orders could have a material adverse effect on our revenue and earnings for that quarter.
- 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.
- We base our operating expenses in part on our expectations for future revenue and generally must commit to expense levels in advance of revenue being recognized. Since only a small portion of our expenses varies with revenue, any revenue shortfall typically causes a direct reduction in net income.

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

We have acquired a number of companies or their assets in recent years, including six transactions in fiscal 2004 and three transactions in fiscal 2003, and, as part of our efforts to expand our product and services offerings, we expect to acquire additional companies.

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 with our products;
- Difficulties in retaining key employees and integrating them into our company;
- Challenges in ensuring acquired products 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 assurance that any acquisition will have a positive effect on our future performance. Furthermore, if we later determine we cannot use or sell an acquired product or technology, we could be required to write down the goodwill and intangible assets associated with such product or technology; these write-downs, 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 2004 and 2003, we derived 45% and 43% of our revenue, respectively, from outside North America; going forward, we expect our overall orders and revenue targets will continue to depend on substantial contributions from outside North America. Foreign sales are vulnerable to regional or worldwide economic, political and health conditions, including the effects of international political conflict and hostilities. Further, any stagnation of foreign economies could adversely affect our performance by reducing the amount of revenue derived from outside North America.

Our operating results are affected by fluctuations in foreign currency exchange rates. Our results of operations can be adversely affected when, as has been the case in recent months, the U.S. dollar weakens relative to other currencies, particularly the Euro, the Japanese yen and, to a lesser extent, the Canadian dollar, as a result of the conversion of expenses of our foreign operations denominated in foreign currencies into the dollar. Exchange rates are subject to significant and rapid fluctuations, and therefore we cannot predict the prospective impact of exchange rate fluctuations on our business, results of operations and financial condition. While we hedge certain foreign currency exposures of our business, we can provide no assurance that our hedging transactions will be effective.

*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. In addition, a substantial portion of our outstanding stock options held by employees had exercise prices above the market price of our stock, which has decreased their value as an employee retention tool. As a result, we could experience higher employee turnover. Our employees, including employees who have joined Synopsys in connection with acquisitions, are often recruited aggressively by our competitors and our customers. Our failure to recruit and retain key technical, sales and managerial employees would have a material adverse effect on our business, results of operations and financial condition.

We issue stock options and maintain employee stock purchase plans as a key component of our overall compensation. There is growing pressure on public companies from shareholders generally and various organizations to reduce the rate at which companies, including Synopsys, issue stock options to employees, which may make it more difficult to obtain stockholder approval of our equity compensation plans when required. In addition, the Financial Accounting Standards Board (FASB) has adopted changes to generally accepted accounting principles (GAAP) that will require us to adopt a different method of determining the compensation expense for our employee stock options and employee stock purchase plans beginning in the fourth quarter of fiscal 2005. We believe expensing stock options will increase shareholder pressure to limit future option grants. Any of these factors could make it more difficult for us to grant stock options to employees or maintain our employee stock purchase plans in the future. As a result, we may lose top employees to non-public, start-up companies or may generally find it more difficult to attract, retain and motivate employees, either of which could materially and adversely affect our business, results of operations and financial condition.

*Customer payment defaults could adversely affect our financial condition and results of operations.*

Our backlog consists principally of customer payment obligations not yet due that are attributable to software we have already delivered. These customer obligations are typically not cancelable, but will not yield the expected revenue and cash flow if the customer defaults and fails to pay amounts owed. In these cases, we will generally take legal action to recover amounts owed. Moreover, existing customers may seek to renegotiate pre-existing contractual commitments due to adverse changes in

their own businesses. Though we have not, to date, experienced a material level of defaults, any material payment default by our customers or significant reductions in existing contractual commitments could have a material adverse effect on our financial condition and results of operations.

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

Our success depends in part upon protecting our proprietary technology. To protect this technology, we rely on agreements with customers, employees and others and on intellectual property laws worldwide. We can provide no assurance that these agreements will not be breached, that we would have adequate remedies for any breach or that our trade secrets will not otherwise become known or be independently developed by competitors. Moreover, certain foreign countries do not currently provide effective legal protection for intellectual property; our ability to prevent the unauthorized use of our products in those countries is therefore limited. We have a policy of aggressively pursuing action against companies or individuals that wrongfully appropriate or use our products and technologies. However, there can be no assurance that these actions will be successful. If we do not obtain or maintain appropriate patent, copyright or trade secret protection, for any reason, or cannot fully defend our intellectual property rights in certain jurisdictions, our business, financial condition and results of operations would be materially and adversely affected. In addition, intellectual property litigation is lengthy and expensive and legal fees related to such litigation may reduce our net income.

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

Under our customer agreements and other license agreements, we agree in many cases to indemnify our customers if 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, however, result in costly and time-consuming litigation, require us to enter into royalty arrangements, subject us to damages or injunctions restricting our sale of products, require us to refund license fees to our customers or to forgo future payments or require us to redesign certain of our products, any one of which could materially and adversely affect our business, results of operations and financial condition.

*We are subject to changes in financial accounting standards, which may adversely 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 affecting the way we license our products. 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.

In December 2004, FASB issued statement of Financial Accounting standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R), which will be effective in our fourth quarter of fiscal 2005. SFAS 123R will result in our recognition of substantial compensation expense relating to our employee stock options and employee stock purchase plans. 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 recognize any compensation related to stock option grants we issue under our stock

option plans or the discounts we provide under our employee stock purchase plans. Under the new rules, we are required to adopt a fair value-based method for measuring the compensation expense related to employee stock awards; this will lead to substantial additional compensation expense. This change will have a material adverse effect on our reported results of operations. Note 2 to our Consolidated Financial Statements in this report provides our pro forma net income and earnings per share as if we had used a fair value-based method similar to the methods required under SFAS 123R to measure the compensation expense for employee stock awards during fiscal 2004, 2003 and 2002.

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

Because our common stock is publicly traded on the Nasdaq stock market, we are subject to rules and regulations promulgated by a number of governmental and self-regulated organizations, including the SEC, Nasdaq and the Public Company Accounting Oversight Board, which monitors the accounting practices of public companies. Many of these regulations have only recently been enacted, and continue to evolve, making compliance more difficult and uncertain. In addition, our efforts to comply with these new regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

In particular, Section 404 of Sarbanes-Oxley Act of 2002 and related regulations require us to include a management assessment of our internal controls over financial reporting and auditor attestation of that assessment in our annual report for our fiscal year ending October 31, 2005. This effort has required, and continues to require, the commitment of significant financial and managerial resources. Although we believe that our ongoing review of our internal controls will enable us to provide a favorable assessment of our internal controls and for our external auditors to provide their attestation as of October 31, 2005 as required by Section 404, we can give no assurance that these efforts will be completed on a timely and successful basis. Any failure to complete a favorable assessment and obtain our auditors' attestation could have a material adverse effect on our stock price.

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

Despite extensive testing prior to releasing our products, software products frequently contain errors or defects, especially when first introduced, when new versions are released or when integrated with technologies developed by acquired companies. Product errors could affect the performance or interoperability of our products, could delay the development or release of new products or new versions of products and could adversely affect market acceptance or perception of our products. In addition, allegations of IC manufacturability issues resulting from use of our IP products could, even if untrue, adversely affect our reputation and our customers' willingness to license IP products from us. Any such errors or delays in releasing new products or new versions of products or allegations of unsatisfactory performance could cause us to lose revenue 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 materially and adversely affect our business, results of operations and financial condition.

*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. Our tax filings are subject to review or audit by the Internal Revenue Service and state, local and foreign taxing authorities. We exercise judgment in determining our worldwide provision for income taxes and, in the ordinary course of our business, there may be transactions and calculations where the ultimate tax determination is uncertain. In addition, we are undergoing an audit

of our United States federal income tax returns for fiscal years 2000 and 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 adverse 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.*

“Hackers” and others have in the past 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.

*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 Department of Commerce places significant export controls on our existing, future or acquired products, our business would be materially and adversely affected.

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

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

The following table presents the carrying value and related weighted-average total return for our investment portfolio as of October 31, 2004.

	<u>Carrying Value</u>	<u>Weighted Average</u>
	<u>(in thousands)</u>	<u>Total Return</u>
Short-term Investments (U.S.) . . . . .	\$145,876	1.71%
Money Market Funds (U.S.) . . . . .	38,827	1.19%
Short-term Investments (International) . . . . .	86,443	1.62%
Cash Equivalent Investments (International) . . . . .	15,911	1.62%
Cash Deposits and Money Market Funds (International) . . . . .	<u>230,880</u>	1.29%
Total interest bearing instruments . . . . .	<u>\$517,937</u>	1.47%

As of October 31, 2004, the stated maturities of our current short-term investments and cash equivalents are \$99.9 million within one year, \$93.1 million within one to five years, \$10.3 million within five to ten years and \$44.9 million after ten years. However, in accordance with our investment policy, the weighted-average effective duration of our total invested funds does not exceed one year. 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.

The following table presents the amounts of our cash equivalents and investments as of October 31, 2004 that are subject to interest rate risk by calendar year of expected duration and average interest rates:

	Year Ended December 31,					Total	Fair Value
	2004	2005	2006	2007	2008		
	(in thousands)						
Cash equivalents (variable rate) . . . . .	\$285,618	—	—	—	—	\$285,618	\$285,618
Average interest rate . . . . .	1.34%						
Short-term investments (variable rate) . . . . .	\$ 32,808	\$ 8,600	\$ 1,851	\$ 6,275	—	\$ 49,534	\$ 49,534
Average interest rate . . . . .	1.79%	1.61%	1.88%	1.99%			
Short-term investments (fixed rate) . . . . .	\$ 1,997	\$ 89,487	\$ 62,273	\$29,028	—	\$182,785	\$182,785
Average interest rate . . . . .	1.74%	2.05%	1.95%	2.13%			

In April 2004, we entered into a three-year senior unsecured revolving credit facility. This facility contains financial covenants requiring us to maintain a minimum leverage ratio and specified levels of cash, as well as other non-financial covenants. The facility terminates on April 28, 2007. Borrowings under the facility bear interest at the greater of the administrative agent's prime rate or the Federal funds rate plus 0.50%; however, we have the option to pay interest based on the outstanding amount at eurodollar rates plus a spread between 0.80% and 1.125% based on a pricing grid tied to a financial covenant. In addition, commitment fees are payable on the facility at rates between 0.20% and 0.25% per annum based on a pricing grid tied to a financial covenant. In April, 2004, we borrowed and repaid \$200 million under the credit facility. As of October 31, 2004, we had no outstanding borrowings under the credit facility and we were in compliance with all covenants.

*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. We engage in a program to hedge (i) those currency exposures associated with certain assets and liabilities denominated in non-functional currencies, (ii) forecasted accounts receivable, backlog and accounts payable denominated in non-functional currencies and (iii) the translation effect of our operating expenses denominated in Euro. Our hedging activities are intended to offset the impact of currency fluctuations on the value of these balances and expenses. The success of these activities depends upon the accuracy of our estimates. Looking forward, to the extent our estimates of various balances denominated in non-functional currencies prove inaccurate, we will not be completely hedged, and we will record a gain or loss, depending upon the nature and extent of such inaccuracy. We can provide no assurance 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.

The following table provides information about our foreign currency contracts as of October 31, 2004. Due to the short-term nature of these contracts, the contract rates approximate the weighted-

average currency exchange rates as of October 31, 2004. These forward contracts are rolled forward on a monthly basis to match firmly committed transactions.

	<u>Amount in U.S. Dollars</u>	<u>Contract Rate</u>
	(in thousands)	
Forward Contract Values:		
Japanese yen . . . . .	\$25,034	106.47
Euro . . . . .	15,217	0.7839
Canadian dollar . . . . .	14,137	1.226
British pound sterling . . . . .	1,965	0.54613
Israeli shekel . . . . .	1,736	4.45165
Singapore dollar . . . . .	2,007	1.66085
Taiwan dollar . . . . .	508	33.605
Chinese renminbi . . . . .	3,912	8.246
India Rupee . . . . .	1,116	45.74
	<u>\$65,632</u>	

In fiscal 2005, we began hedging forecasted Euro expenses for periods of up to one year. The gains or losses from these forward contracts will be recorded in other comprehensive income until the forecasted transactions occur.

Net unrealized gains of approximately \$9.6 million and \$19.3 million, net of tax are included in accumulated other comprehensive income on our consolidated balance sheet as of October 31, 2004 and October 31, 2003, respectively. Net cash outflows on maturing forward contracts during the three months ended October 31, 2004 were \$0.8 million.

*Equity Risk.* Our strategic investment portfolio consists of approximately \$12.8 million of minority equity investments in publicly traded and in privately held companies compared to approximately \$8.6 million as of October 31, 2003. 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. The securities of privately held companies are reported at the lower of cost or fair value.



**Item 8. Financial Statements and Supplementary Data**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

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

We have audited the accompanying consolidated balance sheets of Synopsys, Inc. and subsidiaries as of October 31, 2004 and 2003, 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, 2004. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Synopsys, Inc. and subsidiaries as of October 31, 2004 and 2003, and the results of their operations and their cash flows for each of the years in the three-year period ended October 31, 2004 in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 4 to the consolidated financial statements, effective November 1, 2002, Synopsys, Inc. adopted Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*.

/s/ KPMG LLP

Mountain View, California  
December 11, 2004

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

	October 31,	
	2004	2003
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents . . . . .	\$ 346,709	\$ 524,308
Short-term investments . . . . .	232,320	174,049
Total cash, cash equivalents and short-term investments . . . . .	579,029	698,357
Accounts receivable, net of allowances of \$7,113 and \$8,295, respectively . .	132,258	200,998
Deferred income taxes . . . . .	125,601	248,425
Income taxes receivable . . . . .	46,583	72,124
Prepaid expenses and other current assets . . . . .	29,562	19,302
Total current assets . . . . .	913,033	1,239,206
Property and equipment, net . . . . .	178,155	184,313
Long-term investments . . . . .	12,831	8,595
Goodwill, net . . . . .	593,706	550,732
Intangible assets, net . . . . .	198,069	285,583
Long-term deferred income tax assets . . . . .	146,360	—
Other assets . . . . .	50,033	38,924
Total assets . . . . .	<u>\$2,092,187</u>	<u>\$2,307,353</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities . . . . .	\$ 184,146	\$ 204,226
Accrued income taxes . . . . .	188,096	201,855
Deferred revenue . . . . .	368,913	398,878
Total current liabilities . . . . .	741,155	804,959
Deferred compensation and other liabilities . . . . .	51,794	47,390
Long-term deferred revenue . . . . .	34,189	21,594
Stockholders' equity:		
Common stock, \$0.01 par value; 400,000 shares authorized; 147,378 and 155,837 shares outstanding, respectively . . . . .	1,474	1,560
Additional paid-in capital . . . . .	1,240,568	1,198,421
Retained earnings . . . . .	202,146	251,979
Treasury stock, at cost; 9,759 and 662 shares, respectively . . . . .	(175,762)	(20,733)
Deferred stock compensation . . . . .	(2,732)	(7,170)
Accumulated other comprehensive (loss) income . . . . .	(645)	9,353
Total stockholders' equity . . . . .	<u>1,265,049</u>	<u>1,433,410</u>
Total liabilities and stockholders' equity . . . . .	<u>\$2,092,187</u>	<u>\$2,307,353</u>

See accompanying notes to consolidated financial statements.

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

	Year Ended October 31,		
	2004	2003	2002
Revenue:			
Time-based license . . . . .	\$ 663,244	\$ 618,024	\$ 373,594
Upfront license . . . . .	215,955	298,280	245,193
Service . . . . .	212,905	260,679	287,747
Total revenue . . . . .	1,092,104	1,176,983	906,534
Cost of revenue:			
Upfront license . . . . .	19,407	15,950	15,319
Service . . . . .	83,759	77,996	78,167
Time-based license . . . . .	51,321	53,515	45,737
Amortization of intangible assets and deferred stock compensation . . . . .	102,572	92,856	33,936
Total cost of revenue . . . . .	257,059	240,317	173,159
Gross margin . . . . .	835,045	936,666	733,375
Operating expenses:			
Research and development . . . . .	285,281	285,880	225,545
Sales and marketing . . . . .	302,372	310,692	264,809
General and administrative . . . . .	121,547	90,021	78,461
Integration . . . . .	—	—	128,528
In-process research and development . . . . .	1,638	19,850	87,700
Amortization of goodwill, intangible assets and deferred stock compensation . . . . .	34,891	35,318	28,649
Total operating expenses . . . . .	745,729	741,761	813,692
Operating income (loss) . . . . .	89,316	194,905	(80,317)
Other income (expense), net . . . . .	2,276	24,084	(208,623)
Income (loss) before provision (benefit) for income taxes . . . . .	91,592	218,989	(288,940)
Provision (benefit) for income taxes . . . . .	17,255	69,265	(88,947)
Net income (loss) . . . . .	\$ 74,337	\$ 149,724	\$(199,993)
Basic earnings (loss) per share:			
Net income (loss) per share . . . . .	\$ 0.48	\$ 0.99	\$ (1.50)
Weighted-average common shares . . . . .	154,439	151,251	133,616
Diluted earnings (loss) per share:			
Net income (loss) per share . . . . .	\$ 0.46	\$ 0.95	\$ (1.50)
Weighted-average common shares and dilutive stock options outstanding . . . . .	159,991	158,326	133,616

See accompanying notes to consolidated financial statements.

**SYNOPSYS, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**AND COMPREHENSIVE INCOME (LOSS)**  
**(in thousands)**

	Common Stock		Additional Paid-In Capital	Retained Earnings	Treasury Stock	Deferred Compensation	Comprehensive Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Total
	Shares	Amount							
<b>Balance at October 31, 2001</b> . . . . .	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	—	—
Deferred gain on cash flow hedges, 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 . . . . .							(4,259)	(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
<b>Balance at October 31, 2002</b> . . . . .	<u>147,124</u>	<u>\$1,470</u>	<u>\$1,038,651</u>	<u>\$ 198,863</u>	<u>\$(116,499)</u>	<u>\$(8,858)</u>		<u>\$ (146)</u>	<u>\$ 1,113,481</u>

See accompanying notes to consolidated financial statements.

**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>	
<b>Balance Forward:</b>									
<b>Balance at October 31, 2002</b> . . . . .	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	—	—
Deferred gain on cash flow hedges, 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 deferred gains on cash flow hedges, 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 . . . . .							<u>\$ 159,223</u>		
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
<b>Balance at October 31, 2003</b> . . . . .	<u>155,837</u>	<u>\$1,560</u>	<u>\$1,198,421</u>	<u>\$ 251,979</u>	<u>\$(20,733)</u>	<u>\$(7,170)</u>		<u>\$ 9,353</u>	<u>\$ 1,433,410</u>

See accompanying notes to consolidated financial statements.

**SYNOPSYS, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**AND COMPREHENSIVE INCOME (LOSS) (Continued)**  
(in thousands)

	Common Stock		Additional	Retained	Treasury	Deferred	Comprehensive	Accumulated	
	Shares	Amount	Paid-In	Earnings	Stock	Compensation	Income (Loss)	Other	Total
			Capital					Comprehensive	
								Income (Loss)	
<b>Balance Forward:</b>									
<b>Balance at October 31, 2003</b> . . . . .	155,837	\$1,560	\$1,198,421	\$ 251,979	\$ (20,733)	\$(7,170)		\$ 9,353	\$ 1,433,410
Components of comprehensive income:									
Net income . . . . .	—	—	—	74,337	—	—	\$ 74,337	—	74,337
Unrealized gain on investments, net of tax of \$139 . .	—	—	—	—	—	—	295	—	—
Deferred gain on cash flow hedges, net of tax of \$1,270 . . . . .	—	—	—	—	—	—	(2,699)	—	—
Reclassification adjustment on deferred gains on cash flow hedges, net of tax of \$2,972 . . . . .	—	—	—	—	—	—	(7,078)	—	—
Foreign currency translation adjustment . . . . .	—	—	—	—	—	—	(516)	—	—
Accumulated other comprehensive income . . . . .							(9,998)	(9,998)	(9,998)
Total comprehensive income . . . . .							\$ 64,339		
Amortization of deferred stock compensation related to acquisitions, net of forfeitures . . . . .	—	—	(1,083)	—	—	4,438		—	3,355
Acquisition of treasury stock . . . . .	(16,916)	(161)	161	—	(423,303)	—		—	(423,303)
Stock issued under stock option and stock purchase plans . . . . .	8,457	75	12,537	(124,170)	268,274	—		—	156,716
Tax benefits associated with exercise of stock options . .	—	—	30,532	—	—	—		—	30,532
Balance at October 31, 2004 . . . . .	<u>147,378</u>	<u>\$1,474</u>	<u>\$1,240,568</u>	<u>\$ 202,146</u>	<u>\$(175,762)</u>	<u>\$(2,732)</u>		<u>\$ (645)</u>	<u>\$ 1,265,049</u>

See accompanying notes to consolidated financial statements.

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

	Year Ended October 31,		
	2004	2003	2002
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net income (loss) . . . . .	\$ 74,337	\$149,724	\$(199,993)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Amortization and depreciation . . . . .	192,774	184,110	116,100
Provision for doubtful accounts . . . . .	(927)	(1,577)	7,042
Write-down of long term investments . . . . .	2,983	4,525	11,326
Write-down of land and property . . . . .	—	—	14,712
Gain on sale of long-term investments . . . . .	(833)	(22,366)	(21,299)
Write-down of intangible assets . . . . .	675	—	3,785
Deferred income taxes . . . . .	(50,855)	(30,503)	(128,167)
Net change in deferred gains and losses on cash flow hedges . . . . .	(14,019)	18,107	—
Deferred rent . . . . .	—	1,725	2,804
In-process research and development . . . . .	1,638	19,850	87,700
Non-cash compensation expense . . . . .	—	—	1,761
Tax benefit associated with stock options . . . . .	30,532	65,028	19,460
Net changes in operating assets and liabilities:			
Accounts receivable . . . . .	70,511	7,183	5,275
Prepaid expenses and other current assets . . . . .	15,281	66,289	2,930
Other assets . . . . .	(11,318)	(9,055)	(14,814)
Accounts payable and accrued liabilities . . . . .	(26,906)	(31,840)	(77,546)
Accrued income taxes . . . . .	(13,829)	(44,510)	(20,974)
Deferred revenue . . . . .	(17,721)	5,226	5,993
Deferred compensation and other liabilities . . . . .	11,714	9,618	2,856
Net cash provided by (used in) operating activities . . . . .	264,037	391,534	(181,049)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Proceeds from sales and maturities of short-term investments . . . . .	992,300	253,828	876,298
Purchases of short-term investments . . . . .	(1,050,524)	(325,386)	(769,102)
Proceeds from sales of long-term investments . . . . .	412	34,951	56,033
Purchases of long-term investments . . . . .	(6,339)	(1,213)	(5,472)
Purchases of property and equipment . . . . .	(45,005)	(50,148)	(48,755)
Cash paid for acquisitions, net of cash received . . . . .	(60,138)	(167,744)	168,311
Capitalization of software development costs . . . . .	(2,739)	(2,616)	(1,592)
Net cash (used in) provided by investing activities . . . . .	(172,033)	(258,328)	275,721
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from credit facility . . . . .	200,000	—	—
Payments on credit facility . . . . .	(200,000)	—	—
Issuances of common stock . . . . .	156,716	334,928	119,868
Purchases of treasury stock . . . . .	(423,303)	(260,746)	(171,677)
Net cash provided by (used in) financing activities . . . . .	(266,587)	74,182	(51,809)
Effect of exchange rate changes on cash . . . . .	(3,016)	4,340	(1,979)
Net increase in cash and cash equivalents . . . . .	(177,599)	211,728	40,884
Cash and cash equivalents, beginning of year . . . . .	524,308	312,580	271,696
Cash and cash equivalents, end of year . . . . .	\$ 346,709	\$524,308	\$ 312,580
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>			
Cash paid during the year for:			
Income taxes . . . . .	\$ 45,867	\$ 36,055	\$ 70,750
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. (the Company) is a provider of 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-chips (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. All fiscal years presented were 52-week years. Fiscal 2005 will also 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.

*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.

*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 of its foreign operations into U.S. dollars 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.



**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

*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 presented.

*Allowance for Doubtful Accounts.* 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 presented. The following table provides a rollforward of the changes in the allowance for doubtful accounts.

<u>Fiscal Year</u>	<u>Balance at Beginning of Period</u>	<u>Additions (Deductions) Charged to (Removed from) Expense</u>	<u>Write-offs(1)</u>	<u>Balance at End of Period</u>
		(in thousands)		
2004	\$ 8,295	\$ (927)	\$ 255	\$ 7,113
2003	\$11,565	\$(1,577)	\$1,693	\$ 8,295
2002	\$11,027	\$ 7,042	\$6,504	\$11,565

(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

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

charged to operations as incurred and was \$16.1 million, \$15.1 million and \$11.9 million in fiscal 2004, 2003 and 2002, respectively. A detail of property and equipment is as follows:

	October 31,	
	2004	2003
	(in thousands)	
Computer and other equipment . . . . .	\$336,815	\$316,985
Buildings . . . . .	21,821	21,821
Furniture and fixtures . . . . .	28,925	27,629
Land . . . . .	42,754	42,754
Leasehold improvements . . . . .	70,628	66,566
	500,943	475,755
Less accumulated depreciation and amortization . . . . .	(322,788)	(291,442)
Total property and equipment, net . . . . .	\$178,155	\$184,313

*Software Development Costs.* Capitalization of software development costs begins upon the establishment of technological feasibility, which is generally the completion of a working prototype and ends upon general release of the product. Software development costs capitalized were \$2.7 million, \$2.6 million and \$1.6 million in fiscal 2004, 2003 and 2002, 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 \$2.3 million, \$1.6 million and \$1.1 million in fiscal 2004, 2003 and 2002, 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. The goodwill recorded as a result of the business combinations in the years presented is not deductible for tax purposes.

Intangible assets consist of purchased technology, contract rights intangibles, customer installed base/relationship, trademarks and tradenames, covenants not to compete, customer backlog, capitalized software and other intangibles. 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 \$136.4 million, \$124.8 million and \$62.2 million in fiscal 2004, 2003 and 2002, respectively. Amortization of intangible assets in fiscal 2002 includes amortization of goodwill of \$16.2 million.

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 for fiscal 2002. The impairment charge is primarily attributable to the Route Compiler 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 acquired in the acquisition of Avant! Corporation (Avant!) provide customers with similar capabilities as well as additional functionality. As a result, the Company does not anticipate future sales of the Stanza product.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

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

	October 31,	
	2004	2003
	(in thousands)	
Payroll and related benefits . . . . .	\$117,664	\$122,137
Acquisition related costs . . . . .	3,011	4,627
Other accrued liabilities . . . . .	51,193	65,687
Accounts payable . . . . .	12,278	11,775
Total accounts payable and accrued liabilities . . . . .	\$184,146	\$204,226

*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, 2004 and 2003, the invested amounts under the Plan total \$41.8 million and \$31.3 million, respectively, and are recorded as a long-term asset on the Company's balance sheet. As of October 31, 2004 and 2003, the Company has recorded \$44.2 million and \$32.5 million, respectively, as a long-term liability to recognize undistributed amounts due to employees.

*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 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.

Accumulated other comprehensive income consists of the following:

	October 31,	
	2004	2003
	(in thousands)	
Unrealized gain on investments, net of tax of \$208 and \$96, respectively . . .	\$ (443)	\$ (148)
Deferred gain on cash flow hedges, net of tax of \$4,494 and \$12,506, respectively . . . . .	(9,550)	(19,327)
Foreign currency translation adjustment . . . . .	10,638	10,122
	\$ 645	\$(9,353)

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

*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*.

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

- *Technology Subscription Licenses (TSLs)* 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* 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* 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 and are sometimes referred to as “variable maintenance perpetuals.”

The Company sometimes refers to TSLs and term licenses, either individually or collectively, as “renewable licenses” because the customer must purchase an extension or a new license in order to continue using the software after the specified term of the contract expires. In a renewal transaction, the Company may either replace the pre-existing arrangement with an entirely new agreement or maintain two overlapping agreements. Where the Company replaces the existing agreement, the original agreement is often superseded and thereafter the Company delivers software and recognizes revenue based upon the type of license reflected in the new agreement. Where the Company maintains two agreements, revenue recognition on the new incremental agreement is based on the license type purchased. If extended payment terms are granted (as discussed below), license revenue will be recognized as payments become due and payable.

Customers occasionally convert their existing TSLs to perpetual licenses, paying an incremental fee which the Company recognizes upon contract signing in accordance with AICPA Technical Practice Aid (TPA) 5100.73, 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, the Company accounts for all of the arrangement fee as a new sale and recognizes revenue when all other revenue recognition criteria have been met. Synopsys has a policy that defines the specific circumstances under which it accounts for these transactions as a new perpetual license sale.

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

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

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 and all other revenue recognition criteria are met. For perpetual licenses in which less than 75% of the license fee is payable within one year from shipment, we recognize the revenue as customer installments become due and payable.
- *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 and all other revenue recognition criteria are met.

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 (i.e. where less than 75% of the TSL license fees are due within one year from shipment) are offered under the license arrangement, the Company recognizes revenue from TSL license fees in an amount equal to 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.

Service 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.
- *Professional Service Fees.* The Company generally recognizes revenue from consulting and training services as services are performed.

The Company allocates revenue on software transactions (referred to as “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, revenue from maintenance is recognized ratably over the maintenance term and revenue from consulting is recognized as the related services are delivered.

The Company makes significant judgments related to revenue recognition. Specifically, in connection with each transaction involving its products, the Company must evaluate whether:

## SYNOPSYS, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### Note 2. Summary of Significant Accounting Policies (Continued)

(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 determination that an arrangement fee is fixed or determinable depends principally on the arrangement's payment terms. 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 all other revenue recognition criteria are met). If the payment terms do not meet this standard, which is referred to as "extended payment terms," the Company does not consider the fee to be fixed or determinable and generally recognizes revenue when customer installments are due and payable. In the case of a TSL, the Company recognizes revenue ratably even if the fee is fixed or determinable, due to application of other revenue accounting guidelines relating to maintenance services and arrangements that include rights to unspecified future technology.
- *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.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

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.

	Year Ended October 31,		
	2004	2003	2002
	(in thousands)		
Weighted-average common shares for basic net income (loss) per share . . . . .	154,439	151,251	133,616
Weighted-average dilutive stock options outstanding under the treasury stock method . . . . .	<u>5,552</u>	<u>7,075</u>	<u>—</u>
Weighted-average common shares for diluted net income (loss) per share . . . . .	<u>159,991</u>	<u>158,326</u>	<u>133,616</u>

The effect of dilutive employee stock options excludes approximately 10.8 million, 12.0 million and 56.0 million stock options for fiscal 2004, 2003 and 2002, 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 awards under the fair value method as required by SFAS No. 123, as amended by Statement of Financial Accounting Standards No. 148 (SFAS 148), *Accounting for Stock-Based Compensation—Transition and Disclosure*. 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:

	Year Ended October 31,		
	2004	2003	2002
	<b>Stock Options</b>		
Expected life (in years) . . . . .	5.0	5.1	4.9
Risk-free interest rate . . . . .	3.4%	2.9%	4.0%
Volatility . . . . .	53.9%	57.8%	59.0%
	<b>ESPP</b>		
Expected life (in years) . . . . .	1.25	1.25	1.25
Risk-free interest rate . . . . .	1.7%	1.3%	2.1%
Volatility . . . . .	53.6%	58.6%	59.0%

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 2004,

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

2003 and 2002 was \$11.79, \$13.06 and \$12.87 per share, respectively. The weighted-average estimated fair value of share purchase rights granted under the ESPP during fiscal 2004, 2003 and 2002 was \$11.32, \$6.16 and \$7.49 per share, respectively. The Company's pro forma net income and earnings per share data under SFAS No. 123 is as follows:

	Year Ended October 31,		
	2004	2003	2002
	(in thousands, except per share amounts)		
Net income (loss), as reported under APB 25 . . . . .	\$74,337	\$149,724	\$(199,993)
Stock-based employee compensation included in net income (loss) . . . . .	3,355	4,996	1,522
Stock-based employee compensation expense determined under the fair value based method for all awards, net of related tax effects . . . . .	(78,767)	(99,522)	(85,974)
Pro forma net income (loss) under SFAS 123 . . . . .	<u>\$ (1,075)</u>	<u>\$ 55,198</u>	<u>\$(284,445)</u>
Earnings (loss) per share — basic			
As reported under APB 25 . . . . .	\$ 0.48	\$ 0.99	\$ (1.50)
Pro forma under SFAS 123 . . . . .	\$ (0.01)	\$ 0.36	\$ (2.13)
Earnings (loss) per share — diluted			
As reported under APB 25 . . . . .	\$ 0.46	\$ 0.95	\$ (1.50)
Pro forma under SFAS 123 . . . . .	\$ (0.01)	\$ 0.35	\$ (2.13)

*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, 2004, 2003, and 2002, the Company had \$65.6 million, \$143.1 million and \$305.1 million, respectively, of short-term foreign currency forward contracts outstanding. The fair value of these contracts was not significant as of October 31, 2004, 2003 or 2002.

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, 2004, an unrealized gain of approximately \$9.6 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.



**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 2. Summary of Significant Accounting Policies (Continued)**

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, 2004, 2003, and 2002.

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.

*Warranties.* Synopsys typically warrants its products to be free from defects in media and to substantially conform to material specification for a period of 90 days. The Company also indemnifies its customers from third party claims of intellectual property infringement relating to the use of our products and is currently defending some of its customers against claims that their use of one of our products infringes a patent held by Japanese electronics company. Historically, costs related to these guarantees have not been significant but the Company is unable to estimate the potential impact of these guarantees on the future results of operations.

*Effect of New Accounting Pronouncements.* In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R) which will be effective in the fourth quarter of fiscal 2005. SFAS 123R will result in the recognition of substantial compensation expense relating to our employee stock options and employee stock purchase plans. The Company currently uses the intrinsic value method to measure compensation expense for stock-based awards to its employees. Under this standard, the Company generally does not recognize any compensation related to stock option grants the Company issues under its stock option plans or related to the discounts the Company provides under its employee stock purchase plans. Under the new rules, the Company is required to adopt a fair-value-based method for measuring the compensation expense related to employee stock awards; this will lead to substantial additional compensation expense and therefore will have a material adverse effect on the Company's reported results of operations. The paragraph entitled *Stock Based Compensation* above provides the pro forma net income and earnings per share as if the Company had used a fair-value-based method similar to the methods required under SFAS 123R to measure the compensation expense for employee stock awards during fiscal 2004, 2003 and 2002.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures**

*Purchase Combinations.* During the fiscal years presented, the Company made a number of purchase acquisitions. 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, other intangible 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 material acquisitions. The consolidated financial statements include the operating results of each business from the date of acquisition.

*Fiscal 2004 Acquisitions*

In February 2004, the Company completed the acquisition of Accelerant Networks, Inc. (Accelerant) for total consideration of \$23.8 million and the acquisition of the technology assets of Analog Design Automation, Inc. (ADA) for total consideration of \$12.2 million. In October 2004, the Company completed the acquisition of Cascade Semiconductors, Inc. (Cascade) for total upfront consideration of \$15.8 million and contingent consideration of up to \$10.0 million to be paid upon the achievement of certain performance milestones over the three years following the acquisition. The Company acquired Accelerant in order to enhance Synopsys' standards-based IP solutions. The Company acquired ADA in order to enhance the Company's analog and mixed signal offerings. The Company acquired Cascade, an IP provider, in order to augment Synopsys' offerings of PCI Express products. Included in the total consideration of these acquisitions are aggregate acquisition costs of \$4.3 million, consisting primarily of legal and accounting fees and other directly related charges.

In fiscal 2004, the Company completed one additional acquisition and two additional asset acquisition transactions for aggregate consideration of \$12.3 million in upfront payments and acquisition-related costs and contingent consideration of up to \$5 million to be paid based on the achievement of certain milestones. The Company does not consider these acquisition transactions to be material, individually or in the aggregate, to the Company's balance sheet or results of operations.

The results of operations of the acquisitions and the impact on operations of the acquisition of assets transactions are included in the accompanying consolidated statements of operations from the date of each respective transaction through October 31, 2004.

The Company allocated the total aggregate purchase consideration for these transactions to the assets and liabilities acquired, including identifiable intangible assets, based on their respective fair values at the acquisition dates, resulting in aggregate goodwill of \$24.5 million. Aggregate identifiable intangible assets as a result of these acquisitions, consisting primarily of purchased technology and other intangibles, are \$44.8 million, and are being amortized over three to five years. Goodwill, representing the excess of the purchase consideration over the fair value of tangible and identifiable intangible assets acquired in the acquisitions, will not be amortized and is not deductible for tax purposes. The Company included the amortization of purchased technology in cost of revenue in its statements of operations for the fiscal year ending October 31, 2004.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

*Fiscal 2003 Acquisitions*

*Numerical Technologies, Inc. (Numerical).* On March 1, 2003, the Company completed its acquisition of Numerical. The Company acquired Numerical in order to combine Numerical's subwavelength, lithography-enabling solutions with the Company's leading integrated circuit (IC) design solutions and thereby reduce costs and manufacturing risk for the Company's customers.

*Purchase Price.* The Company paid Numerical common stockholders \$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:

	<u>(in thousands)</u>
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, 2004, the Company had paid \$9.2 million of the acquisition-related costs.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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

	<u>(in thousands)</u>
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><u>\$266,758</u></u>

(1) Estimated useful life is 3 years.

(2) Estimated useful life is 6 years.

*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 in the pro forma results of operations 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

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

actually acquired Numerical at the beginning of fiscal 2002. Pro forma results below do not necessarily indicate future operating results.

	Year Ended October 31,	
	2003	2002
	(in thousands, except per share amounts)	
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 \$19.8 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 acquisition agreements. In-process research and development expenses associated with these acquisitions totaled \$1.6 million for fiscal 2003. These acquisitions are not considered material, individually or in the aggregate, 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!. The Company acquired Avant! in order to offer its customers a complete end-to-end solution for system-on-chip design that combines the Company's logic synthesis and design verification tools with Avant!'s advanced place and route, physical verification and design integrity products, thus increasing customers' design efficiencies.

**SYNOPSYS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

*Purchase Price.* Holders of Avant! common stock received 0.371 of a share of the Company's 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 the Company's common stock. The fair value of the Company's shares issued was based on a per share value of \$54.74, which was equal to the Company's 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 consisted of the following:

	<u>(in thousands)</u>
Fair value of 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:

<u>(in thousands)</u>	<u>Balance June 6, 2002</u>	<u>Additions</u>	<u>Payments</u>	<u>Balance October 31, 2002</u>	<u>Payments</u>	<u>Reversals</u>	<u>Balance October 31, 2003</u>	<u>Payments</u>	<u>Reversals</u>	<u>Balance October 31, 2004</u>
Facilities closure costs . . . . .	\$ 62,638	\$ —	\$ (5,377)	\$57,261	\$(25,119)	\$(31,578)	\$ 564	\$(323)	\$ —	\$ 241
Employee severance costs . . . . .	50,367	647	(50,724)	290	(290)	—	—	—	—	—
Other acquisition-related costs . . . . .	37,342	55	(33,557)	3,840	(1,580)	—	2,260	(531)	(123)	1,606
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>	<u>\$(854)</u>	<u>\$(123)</u>	<u>\$1,847</u>

As of October 31, 2004, \$117.5 million of costs have been paid. The remaining acquisition-related costs consist primarily of legal and other professional services fees related to the liquidation of certain of the legal entities acquired in the merger.

Facilities closure costs at the closing date include \$54.2 million related to Avant!'s corporate headquarters. After the merger, the Company 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. The Company 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.

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 in accordance with his pre-merger employment agreement, (ii) \$5.1 million

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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:

	<u>(in thousands)</u>
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 as a result of obtaining additional information on the venture fund's non-public investments and the Company's

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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.

During fiscal 2004, the Company also performed a revaluation of acquired deferred tax assets resulting in a decrease of \$17.4 million in deferred tax assets. The revaluation was based on review of pre-acquisition tax returns.

*Asset Held for Sale.* As a result of the merger, the Company acquired Avant!'s physical libraries business and the Company 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.

*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 were scheduled to occur over the terms of the arrangements. These ratable licenses and maintenance arrangements required future performance by both parties and, as such, represented 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, the Company entered into a policy with a subsidiary of American International Group, Inc. 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.



**SYNOPSYS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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 the Company reached a settlement of the litigation. Under the terms of the agreement, the Company 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 the Company have entered into reciprocal license arrangements covering the intellectual property at issue in the litigation. As a result of the payment, the Company 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 acquired Co-Design. The Company acquired Co-Design in order to help promote the development and adoption of the Superlog hardware design language, combine Co-Design's technology with the Company's high-level verification and design implementation tools and give the Company access to Co-Design's highly-skilled employees.

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:

	<u>(in thousands)</u>
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.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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

	<u>(in thousands)</u>
Current assets . . . . .	\$ 3,532
Identifiable intangible assets:	
Core/developed technology(1) . . . . .	6,200
Goodwill . . . . .	27,659
Other assets . . . . .	<u>1,220</u>
Total assets acquired . . . . .	38,611
Escrow payable . . . . .	3,443
Other current liabilities . . . . .	<u>857</u>
Total liabilities assumed . . . . .	4,300
Net assets acquired . . . . .	<u><u>\$34,311</u></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 \$4.2 million of these notes will be paid in September 2007. The remaining notes plus accrued interest were paid in September 2004 when certain milestones were met.

*inSilicon Corporation (inSilicon).* On September 20, 2002, the Company completed its acquisition of inSilicon. The Company acquired inSilicon in order to broaden its offering of standard-based IP products.

*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:

	<u>(in thousands)</u>
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 . . . . .	<u>2,975</u>
	<u><u>\$74,582</u></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.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

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

	<u>(in thousands)</u>
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.

The amortization of intangible assets is included in cost of revenue in the statement of operations. 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

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3. Business Combinations and Divestitures (Continued)**

acquired Avant! and inSilicon at the beginning of fiscal 2002. Pro forma results below do not necessarily indicate future operating results.

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

(1) Fiscal 2002 pro forma results of operations for the period from November 1, 2002 to the respective dates 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 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 Company 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 Company 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 the Company which were originally purchased from Avant!, (v) \$3.7 million goodwill impairment charge related to a prior Company 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.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 4. Goodwill and Other Intangible Assets, Net**

Goodwill consists of the following:

	<u>(in thousands)</u>
Balance at October 31, 2002 . . . . .	\$434,554
Additions(1) . . . . .	143,361
Other adjustments(2) . . . . .	<u>(27,183)</u>
Balance at October 31, 2003 . . . . .	550,732
Additions(3) . . . . .	43,649
Other adjustments . . . . .	<u>(675)</u>
Balance at October 31, 2004 . . . . .	<u><u>\$593,706</u></u>

- (1) Additions include goodwill acquired in the Numerical acquisition 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.
- (3) Additions represent an increase of goodwill of \$17.4 million as a result of an adjustment to the deferred tax assets recorded upon the acquisition of Avant!, goodwill acquired in the acquisitions of Accelerant of \$17.4 million and Cascade of \$6.9 million, contingent consideration earned and paid of \$1.7 million and amounts related to foreign currency fluctuations for goodwill not denominated in U.S. dollars.

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

	<u>Gross Assets</u>	<u>Accumulated Amortization</u>	<u>Net Assets</u>
	<u>(in thousands)</u>		
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 . . . . .	123,109	26,767	96,342
Trademark and tradename . . . . .	18,007	8,418	9,589
Other intangibles . . . . .	461	90	371
Capitalized software and development costs . . . . .	<u>4,897</u>	<u>2,270</u>	<u>2,627</u>
Total intangible assets(1) . . . . .	<u><u>\$457,455</u></u>	<u><u>\$171,872</u></u>	<u><u>\$285,583</u></u>

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 4. Goodwill and Other Intangible Assets, Net (Continued)**

Intangible assets as of October 31, 2004 consisted of the following:

	<u>Gross Assets</u>	<u>Accumulated Amortization</u>	<u>Net Assets</u>
		(in thousands)	
Contract rights intangible . . . . .	\$ 51,700	\$ 41,647	\$ 10,053
Core/developed technology . . . . .	279,110	188,023	91,087
Covenant not to compete . . . . .	10,744	5,866	4,878
Customer backlog . . . . .	8,270	5,821	2,449
Customer relationship . . . . .	123,540	47,579	75,961
Trademark and tradename . . . . .	18,007	14,420	3,587
Other intangibles . . . . .	5,993	397	5,596
Capitalized software development costs . . . . .	7,635	4,590	3,045
Total intangible assets(1) . . . . .	<u>\$504,999</u>	<u>\$308,343</u>	<u>\$196,656</u>

- (1) Total intangible assets do not include \$1.4 million related to foreign currency fluctuations for intangible assets which are not denominated in U.S. dollars.

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

	<u>Year Ended October 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
	(in thousands)		
Contract rights intangible . . . . .	\$ 17,233	\$ 17,233	\$ 7,181
Core/developed technology . . . . .	83,666	75,639	27,124
Covenant not to compete . . . . .	2,536	2,382	948
Customer backlog . . . . .	3,573	2,215	33
Customer relationship . . . . .	20,801	19,659	7,118
Trademark and tradename . . . . .	6,002	5,960	2,458
Other intangibles . . . . .	307	90	—
Capitalized software and development costs . . . . .	2,319	1,598	1,111
Total amortization expense . . . . .	<u>\$136,437</u>	<u>\$124,776</u>	<u>\$45,973</u>

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

<u>Fiscal Year</u>	<u>(in thousands)</u>
2005 . . . . .	\$105,956
2006 . . . . .	40,548
2007 . . . . .	30,363
2008 . . . . .	19,323
2009 . . . . .	466
Total estimated future amortization of other intangible assets . . . . .	<u>\$196,656</u>

The Company adopted Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets, on November 1, 2002. The following table reflects adjusted net loss per share,

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 4. Goodwill and Other Intangible Assets, Net (Continued)**

excluding amortization of goodwill, for fiscal 2002 as if the Company had adopted SFAS 142 as of November 1, 2001.

	Year Ended October 31, 2002
	(in thousands, except per share amounts)
Net loss . . . . .	\$(199,993)
Add: Amortization of goodwill . . . . .	16,201
Adjusted net loss . . . . .	<u>\$(183,792)</u>
Basic and diluted loss per share . . . . .	\$ (1.38)
Weighted-average common shares outstanding . . . . .	133,616

**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
	(in thousands)			
Balance at October 31, 2004				
Classified as current assets:				
Cash . . . . .	\$238,352	\$ —	—	\$238,352
Money market funds and cash equivalent investments . . . . .	108,357	—	—	108,357
Tax-exempt municipal obligations . . . . .	145,923	—	(47)	145,876
Taxable securities . . . . .	86,485	—	(41)	86,444
	<u>579,117</u>	<u>—</u>	<u>(88)</u>	<u>579,029</u>
Classified as non-current assets:				
Equity securities . . . . .	13,667	—	(836)	12,831
Total . . . . .	<u>\$592,784</u>	<u>\$ —</u>	<u>\$(924)</u>	<u>\$591,860</u>
Balance at October 31, 2003				
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
	<u>697,770</u>	<u>587</u>	<u>—</u>	<u>698,357</u>
Classified as non-current assets:				
Equity securities . . . . .	8,938	—	(343)	8,595
Total . . . . .	<u>\$706,708</u>	<u>\$587</u>	<u>\$(343)</u>	<u>\$706,952</u>

As of October 31, 2004, the stated maturities of the Company's current investments (including \$15.9 million classified as cash equivalent investments in the table above) are \$99.9 million within one year, \$93.1 million within one to five years, \$10.3 million within five to ten years and \$44.9 million after

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 5. Financial Instruments (Continued)**

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 in any period presented.

*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. As of October 31, 2004, the carrying value of our strategic investments was \$12.8 million.

During the years ended October 31, 2004, 2003 and 2002 the Company determined that certain strategic investments, with an aggregate value of \$3.5 million, \$7.1 million and \$16.3 million, respectively, were impaired and that the impairment was permanent. Accordingly, the Company recorded a charge of approximately \$3.0 million, \$4.5 million and \$11.3 million during fiscal 2004, 2003 and 2002, 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. The Company has not entered into any such contracts after fiscal 2002. 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.

Prior to fiscal 2002, the Company entered into forward sale contracts with a major financial institution for the sale of certain of the Company's strategic investments. During fiscal 2002 and 2003, the Company physically settled the 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. No forward contracts were entered into in any period presented and none of the prior contracts remain outstanding.

*Debt.* As of October 31, 2004 and 2003, the Company's debt totaled \$7.4 million and \$7.2 million, respectively, and consisted primarily of notes related to acquisitions payable through 2007 and notes to secure bonds related to certain property taxes.

In April 2004, Synopsys entered into a three-year, \$250.0 million senior unsecured revolving credit facility. This facility contains financial covenants requiring that the Company maintain a minimum leverage ratio and specified levels of cash, as well as other non-financial covenants. The facility terminates on April 28, 2007. Borrowings under the facility bear interest at the greater of the administrative agent's prime rate or the Federal funds rate plus 0.50%; however, the Company has the option to pay interest based on the outstanding amount at eurodollar rates plus a spread between 0.80% and 1.125% based on a pricing grid tied to a financial covenant. In addition, commitment fees



**SYNOPSYS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 5. Financial Instruments (Continued)**

are payable on the facility at rates between 0.20% and 0.25% per annum based on a pricing grid tied to a financial covenant. In April 2004, the Company borrowed and repaid \$200.0 million under the credit facility. As of October 31, 2004, the Company had no outstanding borrowings under the credit facility and was in compliance with all covenants.

**Note 6. Commitments and Contingencies**

The Company leases certain of its domestic and foreign facilities and certain office equipment under operating leases. Rent expense was \$36.3 million, \$35.1 million and \$33.7 million in fiscal 2004, 2003 and 2002, 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 has received monthly sublease payments of \$150,000 since March 2004.

Future minimum lease payments on all facility operating leases, net of sublease income, as of October 31, 2004 are as follows:

	<u>Minimum Lease Payments(1)</u>	<u>Lease Income</u> (in thousands)	<u>Net</u>
Fiscal Year			
2005 .....	\$ 38,141	\$ 2,210	\$ 35,931
2006 .....	33,922	2,215	31,707
2007 .....	27,170	2,053	25,117
2008 .....	24,394	2,011	22,383
2009 .....	23,673	677	22,996
Thereafter .....	114,464	—	114,464
Total minimum payments required .....	<u>\$261,764</u>	<u>\$ 9,166</u>	<u>\$252,598</u>

On August 25, 2004, a class action complaint entitled Kanekal v. Synopsys, Inc., et al., No. C-04-3580, was filed in federal district court for the Northern District of California against the Company and certain of its officers alleging violations of the Securities Exchange Act of 1934. The complaint purports to be a class action lawsuit brought on behalf of persons who acquired Company stock during the period of December 3, 2003 through August 18, 2004. The complaint alleges that the individual defendants caused the Company to make false and misleading statements about the Company's business, forecasts, and financial performance, and that certain Company officers or employees sold portions of their stock holdings while in the possession of adverse, non-public information. The complaint does not specify the amount of damages sought. In November 2004, the Court appointed a lead plaintiff in the case. As a result, the Company expects the plaintiff to file an amended complaint in January 2005. Discovery has not commenced in the case and no trial date has been established. While management intends to defend against these federal securities claims vigorously, and the Company does not believe that this lawsuit will have a material effect on the Company's financial position, results of operations or cash flows, there can be no assurance as to the ultimate disposition of this lawsuit. As of October 31, 2004, no amount is accrued as a loss is not considered probable or estimable.

## SYNOPSYS, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### 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 uses 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 has been renewed by the Company's Board of Directors annually through December 2004. In each renewal the Board of Directors replenished the amount of the program up to \$500 million. During fiscal 2004, 2003 and 2002, the Company purchased approximately 16.9 million shares at an average price of \$25.02 per share, approximately 9.4 million shares at an average price of \$27.72 per share, and approximately 7.8 million shares at an average price of \$22.10 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 stockholders, 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, 2004. 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, subject to a plan limit on the number of shares that may be purchased in a purchase period. During fiscal 2004, 2003, and 2002 shares totaling 1,898,402, 1,536,574 and 1,255,882, respectively, were issued under the plan at average per share prices of \$15.51, \$17.35 and \$16.93, respectively. As of October 31, 2004, 5,935,590 shares of common stock were reserved for future issuance under the plan. We intend to seek stockholder approval of an increase in the number of shares reserved for issuance under the ESPP at our 2005 annual meeting of stockholders.

*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 (the Board) may grant either incentive or non-qualified stock options to purchase shares of common stock to employees and consultants, excluding non-employee directors 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, 2004, 8,284,470 stock options remain outstanding and 7,128,810 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 may grant non-qualified stock options to employees and consultants, excluding executive officers. Exercisability, option price and other terms are determined by the Board but the option price shall not be less than

**SYNOPSYS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 7. Stockholders' Equity (Continued)**

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 seven to ten years from the date of grant. As of October 31, 2004, 26,150,004 stock options remain outstanding and 5,460,416 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), 2,100,000 shares were authorized for issuance. The Directors Plan provided 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 was not less than 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 elected 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 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, assuming continued board or committee service through such date. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants were prorated based upon the amount of time since the last annual meeting. The Directors Plan terminated as to future grants in October 2004; however, as of October 31, 2004, 1,297,660 stock options remain outstanding. With the expiration of the Directors Plan, we expect to seek stockholder approval of a new plan for non-employee directors at our 2005 annual meeting of stockholders.

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.

**SYNOPSIS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 7. Stockholders' Equity (Continued)**

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

	<u>Options Outstanding</u> (in thousands)	<u>Weighted- Average Exercise Price</u>
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	(3,362)	\$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	(3,901)	\$24.02
Outstanding at October 31, 2003	42,119	\$21.89
Granted	5,143	\$23.79
Exercised	(6,559)	\$19.41
Canceled	(2,175)	\$24.45
Outstanding at October 31, 2004	<u>38,528</u>	\$22.42
Options exercisable at:		
October 31, 2002	30,460	\$20.25
October 31, 2003	25,924	\$21.65
October 31, 2004	28,026	\$22.06

The following table summarizes information about stock options outstanding as of October 31, 2004:

<u>Range of Exercise Prices</u>	<u>Options Outstanding</u>			<u>Exercisable Options</u>	
	<u>Number Outstanding</u> (in thousands)	<u>Weighted- Average Remaining Contractual Life (In Years)</u>	<u>Weighted- Average Exercise Price</u>	<u>Number Exercisable</u> (in thousands)	<u>Weighted- Average Exercise Price</u>
\$0.001—\$10.76	830	6.13	\$ 7.77	616	\$ 7.54
\$11.22—\$16.13	6,987	6.24	\$15.63	5,126	\$15.79
\$16.19—\$19.78	8,060	5.40	\$18.73	6,924	\$18.77
\$19.94—\$24.80	8,561	6.47	\$22.47	6,337	\$22.50
\$24.92—\$28.38	7,731	7.19	\$26.66	4,768	\$26.66
\$28.68—\$130.44	<u>6,359</u>	7.20	\$31.22	<u>4,255</u>	\$31.28
\$0.001—\$130.44	<u>38,528</u>	6.46	\$22.42	<u>28,026</u>	\$22.06

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**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,		
	2004	2003	2002
	(in thousands)		
United States .....	\$(71,569)	\$ 35,651	\$(309,072)
Foreign .....	163,161	183,338	20,132
	\$ 91,592	\$218,989	\$(288,940)

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

	Year Ended October 31,		
	2004	2003	2002
	(in thousands)		
Current:			
Federal .....	\$23,549	\$(13,355)	\$ 9,605
State .....	304	117	(1,319)
Foreign .....	13,725	47,978	11,474
	37,578	34,740	19,760
Deferred:			
Federal .....	(43,274)	(9,228)	(104,041)
State .....	(7,022)	(1,312)	(21,728)
Foreign .....	(559)	(19,963)	(2,398)
	(50,855)	(30,503)	(128,167)
Charge equivalent to the federal and state tax benefit related to employee stock options .....	30,532	65,028	19,460
Provision (benefit) for income taxes .....	\$17,255	\$ 69,265	\$(88,947)

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 8. Income Taxes (Continued)**

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,		
	2004	2003	2002
	(in thousands)		
Statutory federal tax . . . . .	\$32,057	\$76,646	\$(101,129)
State tax, net of federal effect . . . . .	(2,170)	6,909	(8,105)
Tax credits . . . . .	—	(4,020)	(10,745)
Tax benefit from extraterritorial income exclusion . . . . .	—	—	(2,827)
Tax exempt income . . . . .	(1,206)	(1,265)	(1,865)
Foreign tax (less than) in excess of U.S. statutory tax . . . . .	(12,536)	(16,479)	1,553
Non-deductible merger and acquisition expenses . . . . .	—	—	4,367
In-process research and development expenses . . . . .	573	6,948	30,695
Other . . . . .	537	526	(891)
	\$17,255	\$69,265	\$ (88,947)

Net deferred tax assets of \$272.0 million and \$241.0 million were recorded as of October 31, 2004 and 2003, respectively. The net deferred tax asset of \$272.0 million for fiscal 2004 includes the tax

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 8. Income Taxes (Continued)**

effects of acquired companies. The tax effects of temporary differences and carryforwards which give rise to significant portions of the deferred tax assets and liabilities were as follows:

	October 31,	
	2004	2003
	(in thousands)	
Net deferred tax assets:		
Deferred tax assets:		
Current:		
Net operating loss and tax credit carryovers . . . . .	\$ —	\$ 82,973
Deferred revenue . . . . .	97,870	113,906
Reserves and other expenses not currently deductible . . . . .	32,747	51,427
Other . . . . .	17	267
	130,634	248,573
Non-current:		
Net operating loss and tax credit carryovers . . . . .	166,124	63,940
Deferred compensation . . . . .	15,904	8,853
Depreciation and amortization . . . . .	9,378	9,193
Other . . . . .	5,777	—
	197,183	81,986
Total deferred tax assets . . . . .	327,817	330,559
Deferred tax liabilities:		
Current:		
Unrealized foreign exchange gains . . . . .	5,033	148
Non-current:		
Unrealized gain on securities investments . . . . .	307	96
Net capitalized software development costs . . . . .	917	1,030
Intangible assets . . . . .	49,156	86,114
Other . . . . .	443	2,177
	50,823	89,417
Total deferred tax liabilities . . . . .	55,856	89,565
Net deferred tax assets . . . . .	\$271,961	\$240,994

As of October 31, 2004, 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 returns for fiscal 2000 and 2001 are 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 \$191.2 million as of October 31, 2004 which includes a federal loss carryforward of approximately \$16.8 million resulting from tax deductions in 2003 and 2004 related to employee stock options. The loss carryforwards will expire in 2010 through 2024. Beginning in fiscal 2004, the Company classified all tax loss carryforwards, federal

**SYNOPSYS, INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 8. Income Taxes (Continued)**

foreign tax credits and federal and California research and development credits as non-current because the prospect of utilization in the relevant jurisdiction is not expected in the next twelve months. 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 stockholders' equity.

The Company has federal foreign tax credits of \$40.7 million. If not utilized, \$33.4 million of the foreign tax credit carryforwards will expire in 2008, and \$7.3 million of the foreign tax credit carryforwards will begin to expire in 2014. The Company has federal and California research and development credits of \$22.9 million and \$23.4 million, respectively. If not utilized, the federal research and development credits will begin to expire in 2023. The Company has other state tax credits of \$1.6 million that, if not utilized, will begin to expire in 2007.

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, 2004, the cumulative amount of earnings upon which U.S. income taxes have not been provided is approximately \$36.3 million.

The American Jobs Creation Act of 2004 (the Act) provides for a special one-time elective dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer (Repatriation Provision). The Company has completed its review of the Repatriation Provision and has concluded that it will not benefit from the Act because the Company's overseas earnings occurred in fiscal years not eligible for repatriation. As a result, the Repatriation Provision did not have any impact on income tax expense during fiscal 2004.

**Note 9. Other Income (Expense), Net**

Other income (expense), net consists of the following:

	Year Ended October 31,		
	2004	2003	2002
	(in thousands)		
Interest income, net . . . . .	\$5,974	\$ 3,533	\$ 8,151
Gain (loss) on sale of investment, net of investment write-downs . . . . .	(1,694)	16,536	12,944
Other, net . . . . .	(2,004)	4,015	(229,718)
Total other income (expense), net . . . . .	\$2,276	\$24,084	\$(208,623)

Other expense, net in fiscal 2002 includes \$240.8 million related to the settlement of the Cadence Design Systems, Inc. (Cadence) litigation (*See Note 3*) and \$10.0 million of rental income.

**Note 10. 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





**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 10. Segment Disclosure (Continued)**

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,		
	2004	2003	2002
	(in thousands)		
Revenue:			
Galaxy Design Platform . . . . .	\$ 675,448	\$ 765,688	\$580,808
Discovery Verification Platform . . . . .	225,469	245,914	189,317
IP . . . . .	70,684	74,096	59,976
Design for Manufacturing . . . . .	81,646	52,093	17,681
Professional Services & Other . . . . .	38,857	39,192	58,752
Consolidated . . . . .	\$1,092,104	\$1,176,983	\$906,534

One customer accounted for more than ten percent of the Company's consolidated revenue in fiscal 2004.

**Note 11. Termination of Agreements to Acquire Monolithic System Technology, Inc. and IKOS Systems, Inc.**

On February 23, 2004, the Company entered into a definitive agreement to acquire Monolithic System Technology, Inc. (MoSys) in a cash and stock transaction valued at approximately \$453 million.

On April 16, 2004, the Company exercised its right to terminate its merger agreement pursuant to the agreement's termination provisions and paid MoSys a \$10.0 million termination fee. The Company has included the termination fee in general and administrative expense in the statement of operations for fiscal 2004. On April 23, 2004, MoSys filed a complaint in Delaware Chancery Court against Synopsys and Mountain Acquisition Corp., a wholly owned subsidiary of the Company, alleging that the Company improperly exercised its termination right.

On July 9, 2004, the Company and MoSys announced the settlement of their litigation. Under the terms of the settlement agreement, the Company and MoSys agreed to settle the merger termination lawsuit filed by MoSys without further liability or payment to one another, and MoSys agreed to dismiss its lawsuit.

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 the Company.

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, the Company and IKOS executed a termination agreement by which the parties terminated the IKOS Merger Agreement and pursuant to which IKOS paid the Company 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 in the consolidated statement of operations for fiscal 2002. The Company subsequently executed a revised termination agreement with Mentor and IKOS in order to add Mentor as a party thereto.

## SYNOPSYS, INC.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### Note 12. Related Party and Other Transactions

Revenues derived from Intel Corporation and its subsidiaries in the aggregate accounted for approximately 10.8% and 9.5% of fiscal 2004 and 2003 revenues, respectively. Andy D. Bryant, Intel'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 had a joint venture with Davan Tech Co., Ltd, of Korea (Davan Tech) whereby Davan Tech acted 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 accounted for the investment 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 of Directors 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 Company's Board. The Fund has invested an aggregate of approximately \$1 million in a private company that develops SoC test systems. At the times of the investments, SmartForest Ventures, a venture capital firm of which Company director Deborah Coleman formerly served as a general partner, owned in excess of 10% of the outstanding shares of such company. Ms. Coleman did not participate in any of the Fund's investment decisions.

During fiscal 2004 and 2003, Dr. Newton, provided consulting services to the Company and was paid \$180,000 annually. Under the Company's agreement with Dr. Newton, Dr. Newton provides advice, at the Company's request, concerning long-term technology strategy and industry development issues as well as assistance in identifying opportunities for partnerships with academia.

#### Note 13. Subsequent Events

On November 1, 2004, the Company completed its acquisition of the assets of ISE Integrated Systems Engineering AG (ISE) for cash consideration of \$95 million, net of cash acquired from ISE. The acquisition will enable the Company to expand its offerings of Technology CAD (TCAD) software products and services, which can reduce the number of test chips required to optimize and characterize a new semiconductor process, thereby shortening the time and cost to ramp up yield in leading-edge fabs. The Company expects to allocate the purchase price primarily to in-process research and development, core/developed technology, and/or goodwill.

On November 30, 2004, the Company signed a merger agreement to acquire Nassda Corporation (Nassda), a provider of circuit simulation products, in an all-cash transaction for a purchase price of \$7.00 per share. The aggregate consideration is approximately \$192 million. The transaction is subject to customary regulatory approvals and other closing conditions. In addition, the approval of Nassda's stockholders holding a majority of the outstanding shares of Nassda common stock and approval of the holders of a majority of the outstanding shares of Nassda common stock casting votes affirmatively or negatively on the merger agreement (excluding Nassda's officers and directors, the individual defendants and the related parties of the individual defendants) is required for Nassda and Synopsys to

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 13. Subsequent Events (Continued)**

complete the proposed merger. Certain directors, officers and employees of Nassda who own in the aggregate approximately 60% of Nassda's outstanding common shares have agreed to vote in favor of the adoption and approval of the merger agreement. Upon the closing of the acquisition, the Nassda officers, directors and employees who are defendants in the litigation between the Company and Nassda will make settlement payments to the Company in the aggregate amount of approximately \$61 million.

After the end of fiscal 2004, and in connection with the Company's December 1, 2004 announcement that the Company signed agreements to acquire Nassda Corporation and to settle all outstanding litigation between the two companies, a class action complaint entitled Robert Israel v. Nassda Corporation, et. al., No. 4705695, was filed in the Court of Chancery of the State of Delaware naming Nassda, its directors and the Company as defendants and their affiliates. The complaint purports to be a class action lawsuit brought on behalf of shareholders of Nassda, other than the defendant directors, who allegedly would be injured or threatened with injury if the proposed acquisition of Nassda by the Company proceeded forward on the terms announced. The purported class action seeks to enjoin the transaction, or alternatively, damages. The complaint does not specify the amount of damages sought. The Company believes the claims in this purported class action are without merit, and intends to defend against them vigorously.

On December 1, 2004, the Company's Board of Directors approved the replenishment of the Company's stock repurchase plan authorizing \$500 million for future repurchases of the Company's common stock.

**SYNOPSYS, INC.**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 14. Selected Quarterly Data (Unaudited)**

	Quarter Ended			
	January 31,	April 30,	July 31,	October 31,
	(in thousands, except per share data)			
<b>2004(1):</b>				
Revenue . . . . .	\$285,264	\$294,604	\$281,681	\$230,555
Gross margin . . . . .	224,142	229,706	217,363	163,834
Income (loss) before income taxes . . . . .	43,609	38,500	43,050	(33,567)
Net income (loss) . . . . .	32,152	28,739	41,828	(28,382)
Earnings per share				
Basic . . . . .	\$ 0.21	\$ 0.19	\$ 0.27	\$ (0.19)
Diluted . . . . .	\$ 0.19	\$ 0.18	\$ 0.26	\$ (0.19)
Market stock price range(2):				
High . . . . .	\$ 37.36	\$ 36.35	\$ 30.50	\$ 21.28
Low . . . . .	\$ 28.90	\$ 26.73	\$ 23.91	\$ 14.65
<b>2003:</b>				
Revenue . . . . .	\$268,136	\$292,028	\$300,366	\$316,453
Gross margin . . . . .	208,783	232,652	242,208	253,023
Income (loss) before income taxes . . . . .	48,946	38,926	68,026	63,091
Net income (loss) . . . . .	34,385	22,289	48,475	44,575
Earnings (loss) per share				
Basic . . . . .	\$ 0.23	\$ 0.15	\$ 0.32	\$ 0.29
Diluted . . . . .	\$ 0.22	\$ 0.15	\$ 0.30	\$ 0.27
Market stock price range(2):				
High . . . . .	\$ 26.43	\$ 25.00	\$ 32.96	\$ 34.47
Low . . . . .	\$ 19.24	\$ 18.25	\$ 25.00	\$ 27.07

- (1) In the fourth quarter of fiscal year 2004, the Company incurred approximately \$13 million more in sales compensation expense as a result of higher shipment volumes when compared to the third quarter of fiscal 2004 and approximately \$7 million in expenses related to a reduction in workforce. These changes, coupled with the reduction in revenue of \$51 million from the third quarter to the fourth quarter of fiscal 2004, largely accounts for the decline in income (loss) before income taxes.
- (2) The Company's common stock is traded on the Nasdaq National Market under the symbol "SNPS." The stock prices shown represent the high and low closing sales prices during the periods presented. As of October 31, 2004, there were approximately 560 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, 2004 (the Evaluation Date), Synopsys carried out an evaluation under the supervision and with the participation of Synopsys' 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 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 Synopsys 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 three months ended October 31, 2004 that have materially affected, or are reasonably likely to materially affect, Synopsys' internal control over financial reporting.

**Item 9B. Other Information**

None.

**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, 2004. Each directors term of office as a director is until the next annual meeting of stockholders and until his or her successor is elected and qualified.

<u>Name</u>	<u>Age</u>	<u>Year First Elected Director</u>
Aart J. de Geus . . . . .	50	1986
Andy D. Bryant . . . . .	54	1999
Chi-Foon Chan . . . . .	55	1998
Bruce R. Chizen . . . . .	49	2001
Deborah A. Coleman . . . . .	51	1995
A. Richard Newton . . . . .	53	1987; 1995
Sasson Somekh . . . . .	58	1999
Roy Vallee . . . . .	52	2003
Steven C. Walske . . . . .	52	1991

## Background of Directors

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

*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, an integrated circuit manufacturer, 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 Kryptiq 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. In addition, 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 a General Partner of SmartForest Ventures, a venture capital firm, which she co-founded in June 2000. 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, Vice President, Information Systems and Technology and Vice President of Operations. She holds an M.B.A. from Stanford University. Ms. Coleman serves on the Board of Directors of Applied Materials, Inc., a manufacturer of semiconductor fabrication equipment, Kryptiq Corp., a secure-messaging provider of medical information flows, Teja Technologies, Inc., an embedded system software company, and NeoPad, Inc., a fabricator of custom chemical mechanical polishing pads for semiconductor manufacturing.

*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. From 1988 to 2002, Dr. Newton was a Venture Partner with Mayfield, a venture capital partnership, where he contributed to the evaluation and development of over two dozen new companies. He is currently a Venture Partner with Tallwood Venture Capital. Dr. Newton is a fellow of the IEEE and a member of the National Academy of Engineering.

*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 director 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 from November 1992 until June 1998, and also President and Chief Operating Officer from March 1992 until June 1998. 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 of Parametric from August 1994 until June 2000 and as President and Chief Executive Officer of Parametric 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 its Board of Directors has determined that a director qualifying as a “financial expert” serves on the Synopsys’ Audit Committee. Synopsys’ Board of Directors 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 2004 complied with all filing requirements applicable to such persons.

## **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](http://www.synopsys.com/corporate/governance).

Synopsys intends to satisfy the disclosure requirement under Item 5.05 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 and Vice President, Controller and Treasurer by posting such information on its website at [www.synopsys.com/corporate/governance](http://www.synopsys.com/corporate/governance).

## **Item 11. Executive Compensation**

### **Named Executive Officer Compensation**

The following table sets forth the compensation earned during fiscal 2004 by the named executive officers, as defined above in Item 7. *Management’s Discussion and Analysis of Financial Condition and Results of Operations—Stock Option Plans*, for services rendered in all capacities to Synopsys during the last three fiscal years.

### 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	2004	414,615(2)	498,000	47,800	3,070
Chief Executive Officer and Chairman of the Board	2003	400,000	605,000	104,600	2,362
	2002	400,000	535,000	213,000	1,500
Chi-Foon Chan	2004	414,615(2)	402,000	39,900	4,853
President and Chief Operating Officer	2003	400,000	605,000	100,850	3,128
	2002	400,000	535,000	183,400	5,138
Vicki L. Andrews	2004	319,230(2)	268,000(3)	38,300	9,752
Senior Vice President, Worldwide Sales	2003	300,000	390,716(4)	61,150	9,579
	2002	300,000	364,045(4)	145,800	13,884
Raul Camposano(5)	2004	350,000	188,833(6)	21,000	2,670
Senior Vice President and General Manager, Silicon Engineering Group	2003	350,000	235,000	28,800	2,524
Antun Domic(5)	2004	359,230(2)	246,000	39,450	3,336
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 (GTL), Synopsys 401(k) contributions and, in the case of Ms. Andrews only, car allowances. Dr. Chan's 2002 amounts include special travel allowance. Fiscal 2004 amounts are as follows: Dr. de Geus: \$1,570, in GTL and \$1,500 401(k) contributions; Dr. Chan: \$3,353 in GTL and \$1,500 401(k) contributions; Ms. Andrews: \$1,052 in GTL, \$1,500 401(k) contributions and \$7,200 car allowance; Dr. Camposano: \$1,170 in GTL and \$1,500 401(k) contributions; and Dr. Domic: \$1,836 in GTL and \$1,500 401(k) contributions.
- (2) Reflects a change in base salary approved by the Compensation Committee in December 2003 and effective February 2004. Current base salaries for such executive officers are: Dr. de Geus, \$420,000; Dr. Chan, \$420,000; Ms. Andrews, \$350,000; and Dr. Domic, \$370,000.
- (3) Comprised of \$136,120 in bonus and \$131,880 in commissions.
- (4) Represents bonus and commissions earned during fiscal year.
- (5) Information for Dr. Camposano and Dr. Domic is presented only for fiscal 2003 and 2004 as such persons were appointed executive officers during fiscal 2003.
- (6) Comprised of \$185,500 regular bonus and \$3,333 patent bonus.

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* and is incorporated by reference here.

## **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 were authorized for issuance. The Directors Plan provided 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 was 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 vested in full on the date immediately prior to the date of the annual meeting following their grant, assuming continued board or committee service through such date. In the case of directors appointed to the Board between annual meetings, the annual and any committee grants were prorated based upon the amount of time since the last annual meeting. The Directors Plan terminated as to future grants in October 2004. With the expiration of the Directors Plan, we expect to seek stockholder approval of a new plan for non-employee directors at our 2005 annual meeting of stockholders.

During fiscal 2004, 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 \$29.87 per share for Synopsys Board of Directors service during the year. In addition, Ms. Coleman, Dr. Somekh and Messrs. Chizen, Walske and Vallee each received two grants, and Dr. Newton received one grant, of options to purchase 5,000 shares each at an exercise price of \$29.87 per share for Synopsys Board of Directors Committee service during the year.

## **Change of Control Agreements and Named Executive Officer Employment Contracts**

Under the 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 Compensation Committee currently consists of Messrs. Chizen and Walske. Prior to December 2003, the Compensation Committee consisted of Ms. Coleman and Messrs. Bryant, Chizen and Walske. In December 2003, the Committee was reorganized to consist of Ms. Coleman and Messrs. Chizen and Walske. Ms. Coleman resigned as a member of the committee in May 2004. Both of the current members of the committee 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 2004, 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 November 15, 2004 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>
Entities affiliated with Barclays Global Investors, N.A. 45 Fremont Street San Francisco, CA 94105-2228	15,292,406(2)	10.44%
J. & W. Seligman & Co. Incorporated 100 Park Avenue, 8th Floor New York, NY 10017	10,173,866(3)	6.95%
American Century Investment Management 4500 Main Street Kansas City, MO 64111	7,728,641(4)	5.28%
Entities affiliated with Blum Capital Partners, L.P. 909 Montgomery Street—400 San Francisco, CA 94133-4625	7,604,188(5)	5.19%
Vicki L. Andrews	312,105(6)	*
Andy D. Bryant	229,498(7)	*
Raul Camposano	527,542(9)	*
Chi-Foon Chan	2,044,804(8)	1.38%
Bruce R. Chizen	188,332(10)	*
Deborah A. Coleman	153,400(11)	*
Aart J. de Geus	3,850,811(12)	2.57%
Antun Domic	286,256(13)	*
A. Richard Newton	203,832(14)	*
Sasson Somekh	296,666(15)	*
Roy Vallee	125,332(16)	*
Steven C. Walske	187,200(17)	*
All directors and executive officers as a group (19 persons)	9,817,646(18)	6.32%

\* Less than 1%

- (1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as indicated by footnote, and subject to community property laws where applicable, we believe, based on information furnished by such persons and from Forms 13F and 13D filed with the SEC, that the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them as of November 15, 2004. Percentage of beneficial ownership is based on 146,459,720 shares of common stock outstanding as of November 15, 2004, adjusted as required by rules promulgated by the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock issuable pursuant to options held by that person that are currently exercisable or exercisable within 60 days of November 15, 2004 are deemed to be beneficially owned. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person.
- (2) Based solely on a Form 13F filed with the SEC on November 12, 2004 reporting beneficial ownership as of September 30, 2004. The shares are beneficially owned by four institutional investment managers as follows: Barclays Global Investors, NA beneficially owns 11,914,992 shares, 10,393,442 shares over which it exercises sole voting power and 1,521,550 shares over which it

exercises no voting power; Barclays Global Investors LTD beneficially owns 2,204,624 shares, 2,197,704 shares over which it exercises sole voting power and 6,920 shares over which it exercises no voting power; Barclays Global Fund Advisors beneficially owns 1,044,343 shares, 1,040,442 shares over which it exercises sole voting power and 3,901 shares over which it exercises no voting power; and Barclays Global Investors Japan TR & Banking CO LTD beneficially owns 128,447 shares, all of which it exercises sole voting power over.

- (3) Based solely on a Form 13F filed with the SEC on November 4, 2004 reporting beneficial ownership as of September 30, 2004. J. & W. Seligman & Co. Incorporated exercises shared voting power over all of these shares.
- (4) Based solely on Amendment No. 1 to Form 13F filed with the SEC on November 10, 2004 reporting beneficial ownership as of September 30, 2004. American Century Investment Management, Inc. exercises sole voting power over 7,702,041 of these shares and exercises shared voting power over 26,600 of these shares.
- (5) Based solely on Amendment No. 7 to a Form 13D filed with the SEC on November 10, 2004 reporting beneficial ownership as of November 1, 2004. The shares are beneficially owned as follows: Blum Capital Partners L.P. ("Blum L.P.") and Richard C. Blum and Associates, Inc. ("RCBA Inc.") beneficially own 2,532,138 shares on behalf of the limited partnerships for which Blum L.P. serves as the general partner, or on behalf of an entity for which Blum L.P. serves as investment advisor; Blum Strategic GP, L.L. C. ("Blum GP") beneficially owns 1,691,900 shares on behalf of the limited partnership for which it serves as the general partner; Blum Strategic GP II, L.L.C. ("Blum GP II") beneficially owns 3,235,550 shares held on behalf of the limited partnership for which it serves as the general partner and on behalf of the limited partnership for which it serves as the managing limited partner; Blum L.P. has voting and investment power regarding 72,300 legally owned by The Nuclear Decommissioning Trust of Dominion Nuclear Connecticut Inc. and 72,300 shares legally owned by Virginia Electric and Power Company Qualified Nuclear Decommissioning Trust. As the sole general partners of Blum L.P., RCBA, Inc. is deemed the beneficial owner of shares over which Blum L.P. has voting and investment power. As Chairman, director and a substantial shareholder of RCBA Inc., Richard C. Blum might be deemed to be the beneficial owner of the shares beneficially owned by RCBA Inc., and the shares over which Blum GP and Blum GP II have voting and investment power.
- (6) Includes options to purchase 304,718 shares exercisable by Ms. Andrews within 60 days of November 15, 2004.
- (7) Includes options to purchase 227,498 shares exercisable by Mr. Bryant within 60 days of November 15, 2004.
- (8) Includes options to purchase 1,949,726 shares exercisable by Dr. Chan within 60 days of November 15, 2004.
- (9) Includes options to purchase 500,196 shares exercisable by Dr. Camposano within 60 days November 15, 2004.
- (10) Includes options to purchase 188,332 shares exercisable by Mr. Chizen within 60 days November 15, 2004.
- (11) Includes options to purchase 150,000 shares exercisable by Ms. Coleman within 60 days of November 15, 2004.
- (12) Includes options to purchase 3,274,939 shares exercisable by Dr. de Geus within 60 days of November 15, 2004 and excludes 22,000 shares beneficially owned by Dr. de Geus' wife.

- (13) Includes options to purchase 283,256 shares exercisable by Dr. Domic within 60 days of November 15, 2004.
- (14) Includes options to purchase 201,832 shares exercisable by Dr. Newton within 60 days of November 15, 2004.
- (15) Includes options to purchase 271,666 shares exercisable by Dr. Somekh within 60 days of November 15, 2004.
- (16) Includes options to purchase 123,332 shares exercisable by Mr. Vallee within 60 days of November 15, 2004.
- (17) Includes options to purchase 150,000 shares exercisable by Mr. Walske within 60 days of November 15, 2004.
- (18) Includes options to purchase 8,995,346 shares exercisable by directors and executive officers within 60 days of November 15, 2004.

### **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 10.8%, 9.5% and 7.9% of fiscal 2004, 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.

Synopsys 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 Synopsys officers, including Synopsys' Chief Executive Officer and Chief Operating Officer, and Dr. A. Richard Newton, a member of Synopsys' Board. The Fund has invested an aggregate of approximately \$1 million in a private company that develops SoC test systems. At the times of the investments, SmartForest Ventures, a venture capital firm, of which Synopsys director Deborah Coleman served as a general partner, owned in excess of 10% of the outstanding shares of such company. Ms. Coleman did not participate in any of the Fund's investment decisions to invest in such company.

During fiscal 2004, Dr. Newton 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 2004 and 2003, and fees billed for all other services rendered by KPMG LLP.

	Year Ended October 31,	
	2004	2003
	(in thousands)	
Audit fees . . . . .	\$2,668	\$2,558
Audit related fees(1) . . . . .	344	215
Tax fees(2) . . . . .	152	537
All other fees . . . . .	—	—
Total fees . . . . .	<u>\$3,164</u>	<u>\$3,310</u>

- (1) Audit related fees consisted of fees for due diligence services relating to acquisitions.
- (2) Tax fees consisted of fees for tax compliance, international executive services, international tax compliance services relating to foreign subsidiaries, consultation relating to merger or liquidation of certain foreign subsidiaries 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). In addition, 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 and Financial Statement Schedules

(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 Registered Public Accounting Firm . . . . .	55
Consolidated Balance Sheets . . . . .	56
Consolidated Statements of Operations . . . . .	57
Consolidated Statements of Stockholders' Equity and Comprehensive Income . . . . .	58
Consolidated Statements of Cash Flows . . . . .	61
Notes to Consolidated Financial Statements . . . . .	62

(2) Financial Statement Schedules

None.

(3) Exhibits

See Item 15(b) below.

(b) Exhibits

<u>Exhibit Number</u>	<u>Exhibit Description</u>
2.1	Agreement and Plan of Merger, dated as of December 3, 2001, among the Company, Maple Forest Acquisition L.L.C., and Avant! Corporation <sup>(1)</sup>
2.2	Agreement and Plan of Merger and Reorganization, dated as of February 23, 2004, by and among the Company, Mountain Acquisition Sub, Inc., a wholly-owned subsidiary of the Company, and Monolithic System Technology, Inc. <sup>(2)</sup>
3.1	Amended and Restated Certificate of Incorporation <sup>(3)</sup>
3.2	Restated Bylaws of Synopsys, Inc. <sup>(4)</sup>
4.1	Amended and Restated Preferred Shares Rights Agreement dated April 7, 2000 <sup>(5)</sup>
4.3	Specimen Common Stock Certificate <sup>(6)</sup>
10.1	Form of Indemnification Agreement <sup>(6)</sup>
10.2	Director's and Officer's Insurance and Company Reimbursement Policy <sup>(6)</sup>
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 <sup>(6)</sup>
10.6	Settlement Agreement, dated July 8, 2004, by and among the Company, Mountain Acquisition Sub, Inc. and Monolithic System Technology, Inc. <sup>(7)</sup>

<u>Exhibit Number</u>	<u>Exhibit Description</u>
10.7	Lease Agreement, dated June 16, 1992, 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 <sup>(8)</sup>
10.8	Lease Agreement, dated June 23, 1993, 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 <sup>(9)</sup>
10.9	Lease Agreement, August 24, 1995, 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 <sup>(10)</sup>
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 <sup>(11)(12)</sup>
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 <sup>(11)(12)</sup>
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 <sup>(11)(12)</sup>
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 <sup>(11)(12)</sup>
10.14	Lease dated January 2, 1996 between the Company and Tarigo-Paul, a California Limited Partnership <sup>(13)</sup>
10.15	1992 Stock Option Plan, as amended and restated <sup>(14)(15)</sup>
10.16	Employee Stock Purchase Program, as amended and restated <sup>(14)(16)</sup>
10.17	International Employee Stock Purchase Plan, as amended and restated <sup>(14)(16)</sup>
10.18	Synopsys deferred compensation plan dated September 30, 1996 <sup>(14)(17)</sup>
10.19	1994 Non-Employee Directors Stock Option Plan, as amended and restated <sup>(14)(18)</sup>
10.20	Form of Executive Employment Agreement dated October 1, 1997 <sup>(14)(19)</sup>
10.21	Schedule of Executive Employment Agreements <sup>(11)</sup>
10.22	1998 Nonstatutory Stock Option Plan <sup>(14)(20)</sup>

<u>Exhibit Number</u>	<u>Exhibit Description</u>
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 the Company, effective as of November 13, 2002 <sup>(21)</sup>
10.24	Consulting Services Agreement between the Company and A. Richard Newton dated November 1, 2001 <sup>(14)(22)</sup>
10.25	Amended and Restated Credit Agreement, dated April 28, 2004, among the Company, Bank of America, N.A., as Syndication Agent, certain lenders and JPMorgan Chase Bank, as Administrative Agent <sup>(23)</sup>
10.26	Synopsys Deferred Compensation Plan as Restated Effective August 1, 2002 <sup>(23)</sup>
10.27	Form of Stock Option Agreement under 1992 Stock Option Plan <sup>(14)</sup>
10.28	Director Compensation Arrangements <sup>(14)</sup>
10.29	FY 2004 Recognition Bonus Plan <sup>(14)(24)</sup>
10.30	FY 2004 Individual Compensation Plan for Senior Vice President, Worldwide Sales <sup>(14)(24)</sup>
21.1	Subsidiaries of the Company
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (see page 116)
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 the Company's 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 Current Report on Form 8-K (Commission File No. 000-19807) filed with the Securities and Exchange Commission on February 26, 2004 (this agreement was subsequently terminated by the Company).
- (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 July 31, 2003.
- (4) 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.
- (5) 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.
- (6) 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.

- (7) Incorporated by reference to exhibit to the Company's Current Report on Form 8-K (Commission File No. 000-19807) filed with the Securities and Exchange Commission on July 15, 2004.
- (8) 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.
- (9) 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, 1993.
- (10) 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, 1995.
- (11) 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 October 31, 2002.
- (12) Confidential Treatment granted for certain portions of this document.
- (13) 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 March 31, 1996.
- (14) Compensatory plan or agreement in which an executive officer or director participates.
- (15) 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 October 31, 2001.
- (16) 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 October 31, 2003.
- (17) 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.
- (18) 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.
- (19) 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.
- (20) 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.
- (21) 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.
- (22) 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.
- (23) 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, 2004.
- (24) Incorporated by reference from the Company's Current Report on Form 8-K (Commission File No. 000-19807) filed with the Securities and Exchange Commission on January 11, 2005.

(c) Financial Statement Schedules

None.

## 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 day 11th of January 2005.

SYNOPSYS, INC.

By: /s/ AART J. DE GEUS

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

By: /s/ STEVEN K. SHEVICK

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

By: /s/ RICHARD T. ROWLEY

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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>Name</u>	<u>Title</u>	<u>Date</u>
/s/ AART J. DE GEUS _____ Aart J. de Geus	Chief Executive Officer (Principal Executive Officer) and Chairman of the Board of Directors	January 11, 2005
/s/ CHI-FOON CHAN _____ Chi-Foon Chan	President, Chief Operating Officer and Director	January 11, 2005
/s/ ANDY D. BRYANT _____ Andy D. Bryant	Director	January 11, 2005
/s/ BRUCE R. CHIZEN _____ Bruce R. Chizen	Director	January 11, 2005
/s/ DEBORAH A. COLEMAN _____ Deborah A. Coleman	Director	January 11, 2005
/s/ A. RICHARD NEWTON _____ A. Richard Newton	Director	January 11, 2005
/s/ SASSON SOMEKH _____ Sasson Somekh	Director	January 11, 2005
/s/ STEVEN C. WALSKE _____ Steven C. Walske	Director	January 11, 2005
/s/ ROY VALLEE _____ Roy Vallee	Director	January 11, 2005