# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM	10	-K
------	----	----

(Mark One)	
	) OF THE SECURITIES EXCHANGE ACT OF 1934
For the year ended	October 31, 2012
OF	र
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 1	
For the transition period from	
Commission File	Number 0-19807
CALU	
SYNOI	5979
9/1191	
SYNOPS'	
(Exact name of registrant a	as specified in its charter)
Delaware	 56-1546236
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)
700 East Middlefield Road, Mo	,
(Address of principal executiv	
(650) 58	- ,
(Registrant's telephone nun	
Securities Registered Pursuar	• •
Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$0.01 par value	NASDAQ Global Select Market
Securities Registered Pursuant to	
Indicate by check mark if the registrant is a well-known seasone $\operatorname{Act}$ . Yes $\boxtimes$ No $\square$	ed issuer, as defined in Rule 405 of the Securities
Indicate by check mark if the registrant is not required to file rep	ports pursuant to Section 13 or Section 15(d) of the
Act. Yes ☐ No ⊠	
Indicate by about money whather the registront (4) bee filed all w	
Exchange Act of 1934 during the preceding 12 months (or for such	eports required to be filed by Section 13 or 15(d) of the Securities
and (2) has been subject to such filing requirements for the past 90	
Indicate by check mark whether the registrant has submitted ele	
Interactive Data File required to be submitted and posted pursuant t	
the preceding 12 months (or for such shorter period that the registra	
Indicate by check mark if disclosure of delinquent filers pursuar	nt to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not
contained herein, and will not be contained, to the best of registrant'	
incorporated by reference in Part III of this Form 10-K or any amend	
Indicate by check mark whether the registrant is a large acceler	
smaller reporting company. See definitions of "large accelerated file	r," "accelerated filer" and "smaller reporting company" in
Rule 12b-2 of the Exchange Act. (Check one):	
• – –	n-accelerated filer Smaller Reporting Company
`	if a smaller reporting company)
Indicate by check mark whether the registrant is a shell compar	ny (as defined in Rule 12b-2 of the Exchange
Act). Yes No X	non aguity hold by non affiliaton computed by reference to the
The aggregate market value of the voting and non-voting comm price at which the common equity was last sold as of the last busine	
quarter was approximately \$2.8 billion. Aggregate market value excl	
common stock held by the registrant's officers and directors and by	
outstanding common stock on such date. Exclusion of shares held be	
such person possesses the power, direct or indirect, to direct or cau	
that such person is controlled by or under common control with the $\ensuremath{\text{r}}$	registrant.
On December 8, 2012, 151.2 million shares of the registrant's 0	Common Stock, \$0.01 par value, were outstanding.

### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to the registrant's 2013 Annual Meeting of Stockholders, scheduled to be held on April 3, 2013, are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. Except as expressly incorporated by reference, the registrant's Proxy Statement shall not be deemed to be part of this report.

### SYNOPSYS, INC.

### ANNUAL REPORT ON FORM 10-K Year ended October 31, 2012

### TABLE OF CONTENTS

		Page No
PART I Item 1. Item 1A. Item 1B. Item 2. Item 3. Item 4.	Business Risk Factors Unresolved Staff Comments Properties Legal Proceedings Mine Safety Disclosures	2 10 19 19 20 21
PART II Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer	
Item 6. Item 7.	Purchases of Equity Securities	22 24
	Operations	25
Item 7A. Item 8. Item 9.	Quantitative and Qualitative Disclosures About Market Risk	41 45
Item 9A.	Disclosure	88 88
Item 9B.	Other Information	88
PART III Item 10. Item 11. Item 12.	Directors, Executive Officers and Corporate Governance	89 89
Item 13.	Stockholder Matters	89 89
Item 14.  PART IV	Principal Accountant Fees and Services	89
	Exhibits and Financial Statement Schedules	90
SIGNATU	JRES	95

#### **Cautionary Note Regarding Forward-Looking Statements**

In addition to current and historical information, this Annual Report on Form 10-K (this Form 10-K or Annual Report) contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act) and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These statements can, in some cases, be identified by the use of terms such as "may," "will," "could," "would," "should," "anticipate," "expect," "intend," "believe," "estimate", "project" or "continue," the negatives of such terms, or other comparable terminology. This Form 10-K includes, among others, forward-looking statements regarding our expectations about:

- · our business, product and platform strategies;
- prior and future acquisitions, including the expected benefits of completed acquisitions;
- the impact of macroeconomic conditions on our business and our customers' businesses;
- customer license renewals;
- the completion of development of our unfinished products, or further development or integration of our existing products;
- our ability to successfully compete in the electronic design automation industry;
- the continuation of current industry trends towards vendor and customer consolidation;
- our license mix;
- · our ability to protect our intellectual property rights;
- · our cash, cash equivalents and cash generated from operations; and
- our future liquidity requirements.

These statements involve certain known and unknown risks and uncertainties that could cause our actual results to differ materially from those expressed or implied in our forward- looking statements. Such risks and uncertainties include, among others, those listed in Part I, Item 1A, *Risk Factors* of this Form 10-K. The information included herein is given as of the filing date of this Form 10-K with the Securities and Exchange Commission (SEC) and future events or circumstances could differ significantly from these forward-looking statements. Accordingly, we caution readers not to place undue reliance on these statements. Unless required by law, we undertake no obligation to update publicly any forward-looking statements. Readers are urged to carefully review and consider the various disclosures made in this report and in other documents we file from time to time with the SEC that attempt to advise interested parties of the risks and factors that may affect our business.

#### **Fiscal Year End**

Our fiscal year generally ends on the Saturday nearest to October 31 and consists of 52 weeks, with the exception that approximately every five years, we have a 53-week year. When a 53-week year occurs, we include the additional week in the first quarter to realign fiscal quarters with calendar quarters.

Fiscal 2012 was a 53-week year ending on November 3, 2012, which impacted our revenue, expenses and operating results. Fiscal 2011 and Fiscal 2010 were 52-week years, ending on October 29, 2011 and October 30, 2010, respectively.

For presentation purposes, this Form 10-K refers to October 31 as the end of our fiscal year.

#### Item 1. Business

#### Introduction

Synopsys, Inc. is a global leader in providing software, intellectual property and services used to accelerate innovation in integrated circuits and electronic systems. For 25 years, we have supplied the electronic design automation (EDA) software that engineers use to design and test integrated circuits (ICs), commonly called chips. We also provide software and hardware used to develop the electronic systems that incorporate chips and the software that runs on those chips. Our intellectual property (IP) products are pre-designed circuits that engineers use as components of larger chip designs instead of designing those circuits themselves. To complement these product offerings, we provide technical services to support our solutions and help our customers develop chips and electronic systems.

#### **Corporate Information**

We incorporated in 1986 in North Carolina and reincorporated in Delaware in 1987. Our headquarters are located at 700 East Middlefield Road, Mountain View, California 94043, and our telephone number there is (650) 584-5000. We have approximately 85 offices worldwide.

Our annual and quarterly reports on Forms 10-K and 10-Q (including related filings in XBRL format), current reports on Form 8-K, and Proxy Statements relating to our annual meetings of stockholders, including any amendments to these reports, as well as filings made by our executive officers and directors, are available through our Internet website (www.synopsys.com) free of charge as soon as practicable after we file them with, or furnish them to, the SEC (www.sec.gov). The contents of our website are not part of this Form 10-K.

#### **Background**

Recent years have seen a remarkable proliferation of consumer and wireless electronic products, particularly mobile devices. The growth of the Internet and cloud computing has provided people with new ways to create, store and share information. At the same time, the increasing use of electronics in cars, buildings, appliances and other consumer products is creating a broad landscape of "smart" devices.

These developments depend, in large part, on chips. It is common for a single chip to combine many components (processor, communications, memory, custom logic, input/output) into a single System-on-Chip (SoC), resulting in highly complex chip designs. The most complex chips today contain more than a billion transistors, the basic building blocks for integrated circuits, each of which may have features that are less than 1/1,000th the diameter of a human hair. At such small dimensions, the wavelength of light itself can become an obstacle to production, becoming too big to create such dense features and requiring creative and complicated new approaches from designers.

In addition, due to the popularity of mobile devices and other electronic products, there is increasing demand for integrated circuits and systems with greater functionality and performance, reduced size, and less power consumption. The designers of these products—our customers—are facing intense pressure to deliver innovative products at ever shorter times-to-market, as well as at lower prices. In other words, innovation in chip and system design today often hinges on "better," "sooner," and "cheaper."

Synopsys is at the heart of accelerating innovation in the vibrant electronics market. We provide the software tools, hardware and other technologies that designers use to create chips and systems. The designer's task is to determine how best to locate and connect IC building blocks, verifying that the resulting design behaves as intended and ensuring that the design can be manufactured efficiently and

cost-effectively. This task is a complicated, multi-step process that is both expensive and time-consuming. We offer a wide range of products that help designers at different steps in the overall design process, both for the design of individual integrated circuits and for the design of larger systems. Our products can increase designer productivity and efficiency by automating tasks, keeping track of large amounts of design data, adding intelligence to the design process, facilitating reuse of past designs and reducing errors. Our global service and support engineers also provide expert technical support and design assistance to our customers.

#### **Products and Services**

Revenue from our products and services is reported in four groups: Core EDA (which includes the Galaxy™ Design Platform, the Discovery™ Verification Platform and our FPGA (Field Programmable Gate Array) design products), IP and System-Level Solutions, Manufacturing Solutions, and Professional Services.

#### **Core EDA Solutions**

The process of designing integrated circuits contains many complex steps: architecture definition, RTL (register transfer level) design, functional/RTL verification, logic design or synthesis, gate-level verification, floorplanning, and place and route, to name just a few. Designers use our Core EDA products to automate the integrated circuit design process and to reduce errors. We offer a large number of Core EDA products intended to address the process comprehensively. Our Core EDA products generally fall into the following suites: the Galaxy Design Platform, which includes tools to design an integrated circuit, the Discovery Verification Platform, which includes tools to verify that an integrated circuit behaves as intended, and the FPGA design products. During fiscal 2012, we completed our acquisition of Magma Design Automation, Inc. (Magma), whose Core EDA technology in digital design, analog/mixed-signal design, and circuit simulation and timing analysis, among other design phases, has complemented and extended our own. For further information about our acquisition of Magma, see Note 3 of *Notes to Consolidated Financial Statements*.

#### Galaxy Design Platform

Our Galaxy Design Platform provides our customers with a single, integrated chip design solution that includes industry-leading individual products and incorporates common libraries and consistent timing, delay calculation and constraints throughout the design process. The platform 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 integrated circuit designs. Our products span both digital and analog/mixed-signal designs.

The principal products included in the Galaxy Design Platform are the IC Compiler™ physical design solution, Design Compiler® logic synthesis product, Galaxy Custom Designer® physical design solution for analog/mixed-signal designs, PrimeTime®/PrimeTime SI timing analysis products, StarRC™ product for extraction, and IC Validator for physical verification. With our acquisition of SpringSoft, Inc. (SpringSoft), we expect to further strengthen our offerings for analog/mixed-signal design.

#### Discovery Verification Platform

Our Discovery Verification Platform is a comprehensive, integrated portfolio of functional, analog/mixed-signal, formal and low-power verification products. The platform includes design-for-verification methodologies and provides a consistent control environment to help significantly improve the speed, breadth and accuracy of our customers' functional and mixed-signal verification efforts. The Discovery Verification Platform's components support industry standards and are tightly coupled together through a direct kernel integration for highest throughput mixed-signal simulation.

The principal products included in the Discovery Verification Platform are the VCS<sup>®</sup> comprehensive RTL verification solution, CustomSim™ FastSPICE circuit simulation and analysis product, HSPICE<sup>®</sup> circuit simulator, CustomExplorer™ Ultra mixed-signal regression and analysis environment and Formality<sup>®</sup> formal verification sign-off solution. We expect our acquisition of SpringSoft to allow us to offer additional debug tools as part of the platform. In addition, in October 2012 we completed our acquisition of Emulation & Verification Engineering S.A. (EVE), a provider of hardware emulation products that assist in the verification of chip designs.

#### FPGA Design Products

FPGAs are complex chips that can be customized or programmed to perform a specific function after they are manufactured. For FPGA design, we offer Synplify® Pro and Premier implementation and Identify® debug software tools.

#### IP and System-Level Solutions

#### IP Products

As more functionality converges into a single device or even a single chip, the number of third-party provided IP blocks incorporated into chip designs is rapidly increasing. Synopsys is a leading provider of high-quality, silicon-proven IP solutions for SoCs. The broad DesignWare® IP portfolio includes:

- high quality solutions for widely used interfaces such as USB, PCI Express, DDR, Ethernet, SATA and HDMI.
- analog IP for analog-to-digital data conversion, audio, and video,
- SoC infrastructure IP including datapath IP, AMBA interconnect fabric and peripherals, and verification IP,
- · logic libraries and embedded memories, including SRAMs and non-volatile memory, and
- configurable processor cores, including video and audio IP solutions.

#### System-Level Solutions

Optimizing the system-level design earlier in the development cycle, including both hardware and software components, is increasingly important for customers to meet their performance, time-to-market, and development cost goals. Synopsys has the industry's broadest portfolio of tools, models and services for the system-level design of SoCs.

Our Platform Architect™ software enables early and rapid exploration of SoC architectural trade-offs. To speed the creation, implementation and verification of differentiated IP blocks, we offer SPW™ and System Studio™ tools for algorithm design, Processor Designer™ software for custom processor design, and Synphony Model™ and C Compilers for high-level synthesis.

Escalating software content and complexity in today's electronic devices are driving the adoption of new tools and methods to accelerate software development and ease hardware-software integration and system validation. Our system-level portfolio includes prototyping technologies that improve the productivity of both hardware and software development teams. Our Virtualizer™ tool and broad portfolio of transaction-level models enable the creation of virtual prototypes, fully functional software models of complete systems that enable engineers to start software development up to twelve months earlier than traditional methods. Our HAPS® FPGA-based prototyping systems integrate high performance hardware and software tools with real-world interfaces to enable faster hardware-software integration and full system validation.

#### Manufacturing Solutions

Our Manufacturing Solutions products and technologies enable semiconductor manufacturers to more quickly develop new fabrication processes that produce production-level yields. These products are used in the early research and development phase and the production phase. In the production phase, manufacturers use these products to convert IC design layouts into the masks used to manufacture the devices.

Our Manufacturing Solutions include Technology-CAD (TCAD) device and process simulation products, Proteus optical proximity correction (OPC) products, CATS® mask data preparation product, and Yield Explorer® and Odyssey Yield Management solutions.

#### **Professional Services and Training**

Synopsys provides consulting and design services that address all phases of the SoC development process. These services assist our customers with new tool and methodology adoption, chip architecture and specification development, functional and low-power design and verification, and physical implementation and signoff. We also provide a broad range of expert training and workshops on our latest tools and methodologies.

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

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

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

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

#### **Product Warranties**

We generally warrant our products to be free from defects in media and to substantially conform to material specifications for a period of 90 days for our software products and for up to six months for our hardware products. In certain cases, we also provide our customers with limited indemnification with respect to claims that their use of our software products infringe on United States patents, copyrights, trademarks or trade secrets. We have not experienced material warranty or indemnity claims to date.

#### **Support for Industry Standards**

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

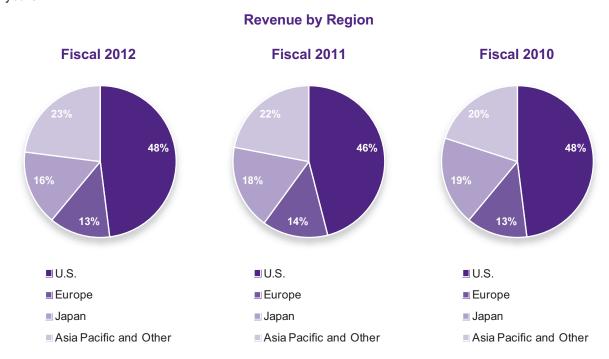
Synopsys' products support more than 30 standards, including the most commonly used hardware description languages: SystemVerilog, Verilog, VHDL, and SystemC. Our products utilize numerous industry standard data formats, application programming interfaces, and databases for the exchange of design data among our tools, other EDA vendors' products, and applications that customers develop internally. We also comply with a wide range of industry standards within our IP product family to ensure usability and interconnectivity.

#### Sales, Distribution and Backlog

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

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

In fiscal 2012, 2011 and 2010, an aggregate of 52%, 54% and 52%, respectively, of Synopsys' total revenue was derived from sales outside of the United States. Geographic revenue, which is based on customer site location, is shown below as a percentage of total revenue for the last three fiscal years:

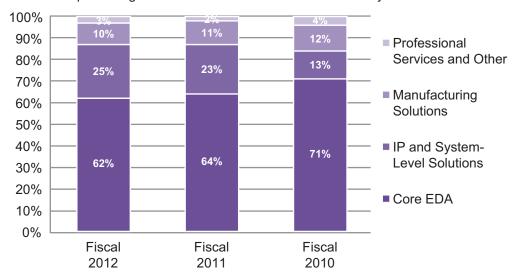


Additional information relating to domestic and foreign operations, including revenue and long-lived assets by geographic area, is contained in Note 12 of *Notes to Consolidated Financial Statements* in Part II, Item 8, *Financial Statements and Supplementary Data*. Risks related to our foreign operations are described in Part I, Item 1A, *Risk Factors*.

Our backlog was approximately \$2.7 billion on October 31, 2012, representing an 8% increase from backlog of \$2.5 billion on October 31, 2011, which resulted from acquisitions during fiscal 2012. Backlog represents committed orders that are expected to be recognized as revenue over the following three years. We currently expect that \$1.17 billion of our backlog will be recognized after fiscal 2013.

Backlog may not be a reliable predictor of our future sales as business conditions may change and technologies may evolve, and customers may seek to renegotiate their arrangements or may default on their payment obligations. For this and other reasons, we may not be able to recognize expected revenue from backlog when anticipated.

Revenue attributable to each of our four platforms established for management reporting purposes is shown below as a percentage of total revenue for the last three fiscal years:



Revenue derived from Intel Corporation and its subsidiaries in the aggregate accounted for 10.5%, 10.6%, and 10.9% of our total revenue in fiscal 2012, 2011 and 2010, respectively.

#### **Research and Development**

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

Our research and development expenses were \$581.6 million, \$491.9 million and \$449.2 million in fiscal 2012, 2011 and 2010, respectively. Our capitalized software development costs were approximately \$3.3 million, \$2.9 million and \$2.9 million in fiscal 2012, 2011 and 2010, respectively.

#### Competition

The EDA industry is highly competitive. We compete against other EDA vendors and against our customers' own design tools and internal design capabilities. In general, we compete principally on technology leadership, product quality and features (including ease-of-use), license terms, post-contract customer support, interoperability with our own and other vendors' products, price and payment terms. No one factor drives an EDA customer's buying decision, and we compete on all fronts to capture a higher portion of our customers' budgets.

Our competitors include EDA vendors that offer varying ranges of products and services, such as Cadence Design Systems, Inc. and Mentor Graphics Corporation. We also compete with other EDA vendors, including frequent new entrants to the marketplace, that offer products focused on one or more discrete phases of the IC design process, as well as with customers' internally developed design tools and capabilities. In the IP area, we compete primarily with our customers' internally developed IP.

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

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

In many cases, we provide our customers the right to "re-mix" a portion of the software they initially licensed for other specified Synopsys products. For example, a customer may use our front-end design products for a portion of the license term and then exchange such products for back-end place and route 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 ability to offer this right to customers often gives us an advantage over competitors who offer a narrower range of products because customers can obtain more of their design flow from a single vendor. At the same time, because in such cases the customer need not obtain a new license and pay an additional license fee for the use of the additional products, the use of these arrangements could result in reduced revenue compared to licensing the individual products separately without re-mix rights.

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

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

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

#### **Proprietary Rights**

Synopsys primarily relies upon a combination of copyright, patent, trademark and trade secret laws and license and nondisclosure agreements to establish and protect its proprietary rights. We have a diversified portfolio of more than 1600 patents issued. Our issued patents have expiration dates through 2032. Our patents primarily relate to our products and the technology used in connection with our products. Our source code is protected both as a trade secret and as an unpublished copyrighted work. However, third parties may develop similar technology independently. In addition, effective copyright and trade secret protection may be unavailable or limited in some foreign countries. We currently hold United States and foreign patents on some of the technologies included in our products and will continue to pursue additional patents in the future. We are not significantly dependent upon any single patent, copyright, trademark or license with respect to our proprietary rights.

In many cases, under our customer agreements and other license agreements, we offer to indemnify our 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.

#### **Employees**

As of October 31, 2012, Synopsys had 8,138 employees, of which 3,355 were based in the United States.

#### **Acquisitions in Fiscal 2012**

For information about acquisitions we completed during fiscal 2012, see Note 3 of *Notes to Consolidated Financial Statements*.

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

The executive officers of Synopsys and their ages as of December 19, 2012 were:

Name	Age	Position
Aart J. de Geus	58	Co-Chief Executive Officer and Chairman of the Board of
		Directors
Chi-Foon Chan	63	Co-Chief Executive Officer and President
Brian M. Beattie	59	Chief Financial Officer
Joseph W. Logan	53	Senior Vice President, Worldwide Sales
Brian E. Cabrera	47	Vice President, General Counsel and Corporate Secretary

Aart J. de Geus co-founded Synopsys and has served as Chairman of our Board of Directors since February 1998 and Chief Executive Officer since January 1994. In May 2012, Dr. Chi-Foon Chan was appointed Co-Chief Executive Officer of Synopsys with Dr. de Geus. Since the inception of Synopsys in December 1986, Dr. de Geus has held a variety of positions, including President, Senior Vice President of Engineering and Senior Vice President of Marketing. He has served as a member of Synopsys' Board of Directors since 1986, and served as Chairman of our Board from 1986 to 1992 and again from 1998 until present. Dr. de Geus has also served on the board of directors of Applied Materials, Inc. since July 2007. Dr. de Geus holds an M.S.E.E. from the Swiss Federal Institute of Technology in Lausanne, Switzerland and a Ph.D. in Electrical Engineering from Southern Methodist University.

Chi-Foon Chan has served as our Co-Chief Executive Officer since May 2012 and as our President and a member of our Board of Directors since February 1998. Prior to his appointment as our Co-Chief Executive Officer in May 2012, he had served as our Chief Operating Officer since April 1997. Dr. Chan joined Synopsys in May 1990 and has held various senior management positions, including Executive Vice President, Office of the President from September 1996 to February 1998 and Senior Vice President, Design Tools Group from February 1994 to April 1997. Dr. Chan has also held senior management and engineering positions at NEC Electronics and Intel Corporation. Dr. Chan holds a B.S. in Electrical Engineering from Rutgers University, and an M.S. and a Ph.D. in Computer Engineering from Case Western Reserve University.

Brian M. Beattie has served as our Chief Financial Officer since January 2006. From October 1999 to January 2006, he was Executive Vice President of Finance and Administration and Chief Financial Officer of SupportSoft, Inc. From May 1998 to May 1999, he served as Vice President of Finance, Mergers and Acquisitions of Nortel Networks Corporation. From July 1996 to April 1998, Mr. Beattie served as Group Vice President of Meridian Solutions of Nortel Networks Corporation. From February 1993 to June 1996, Mr. Beattie served as Vice President of Finance, Enterprise Networks, for Nortel Networks Corporation. Mr. Beattie served on the board of directors of Unwired Planet, Inc. (formerly Openwave Systems Inc.) from December 2010 until November 2012. Mr. Beattie holds a Bachelor of Commerce and an M.B.A. from Concordia University in Montreal.

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

Brian E. Cabrera has served as our Vice President, General Counsel and Corporate Secretary since June 2006. From August 1999 to June 2006, he held various positions with Callidus Software,

most recently as Senior Vice President, General Counsel and Secretary and prior to 2004 as General Counsel and Vice President of Operations and Human Resources. Prior to Callidus, Mr. Cabrera held senior legal positions at PeopleSoft, Netscape Communications, and Silicon Graphics. Mr. Cabrera holds a Bachelor of Arts in Political Science and Philosophy and a Masters in Public Administration from the University of Southern California, as well as a Juris Doctorate from the University of Southern California Law School.

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

#### Item 1A. Risk Factors

A description of the risk factors associated with our business is set forth below. Investors should carefully consider these risks and uncertainties before investing in our common stock.

The continued uncertainty in the global economy, and its potential impact on the semiconductor and electronics industries in particular, may negatively affect our business, operating results and financial condition.

As a result of the recent global recession, the global economy experienced significant uncertainty, stock market volatility, tightened credit markets, concerns about both deflation and inflation, reduced demand for products, lower consumer confidence, reduced capital spending, liquidity concerns and business insolvencies. Further declines, and uncertainty about future economic conditions, could negatively impact our customers' businesses, reducing demand for our products and adversely affecting our business.

The recent global recession adversely affected the semiconductor industry. Semiconductor companies generally remain cautious and focused on their costs, including their research and development budgets which capture spending on EDA products and services. These factors could among other things limit our ability to maintain or increase our sales or recognize revenue from committed contracts and in turn adversely affect our business, operating results and financial condition.

Under our business model, we generally expect more than 90% of our total revenue to be recurring revenue, as a substantial majority of our customers pay for licenses over a multi-year period. However, the turmoil and uncertainty caused by recent economic conditions caused some of our customers to postpone their decision-making, decrease their spending and/or delay their payments to us. If payment defaults by our customers significantly increase or we experience significant reductions in existing contractual commitments, our operating results would be harmed. Furthermore, future periods of decreased committed average annual revenue, customer bankruptcies, or consolidation among our customers, could adversely affect our year-over-year revenue growth.

The recent global recession also adversely affected the banking and financial industry. If the global economy continues to experience uncertainty, our ability to obtain credit on favorable terms could be jeopardized. Furthermore, we rely on several large financial institutions to act as counterparties under our foreign currency forward contracts, provide credit and banking transactions and deposit services worldwide. Should any of our banking partners declare bankruptcy or otherwise default on their obligations, it could adversely affect our financial results and our business.

We cannot predict if or when global economic confidence will be restored. Accordingly, our future business and financial results are subject to considerable uncertainty, and our stock price is at risk of volatile change. If economic conditions deteriorate in the future, or, in particular, if the semiconductor industry does not continue to grow, our future revenues and financial results could be adversely affected. Conversely, in the event of future improvements in economic conditions for our customers, the positive impact on our revenues and financial results may be deferred due to our business model.

#### The growth of our business depends on the semiconductor and electronics industries.

The growth of the EDA industry as a whole, and our business in particular, is dependent on the semiconductor and electronics industries. A substantial portion of our business and revenue depends upon the commencement of new design projects by semiconductor manufacturers and their customers. The increasing complexity of designs of SoCs and ICs, and customers' concerns about managing costs, have previously led and in the future could lead to a decrease in design starts and design activity in general, with some customers focusing more on one discrete phase of the design process. Demand for our products and services could decrease and our financial condition and results of operations could be adversely affected if the semiconductor and electronics industries do not continue to grow, or grow at a slower rate. Additionally, as the EDA industry matures, consolidation has increased competition for a greater share of our customers' EDA spending. This increased competition may cause our revenue growth rate to decline and exert downward pressure on our operating margins, which may have an adverse effect on our business and financial condition.

Furthermore, the semiconductor and electronics industries have become increasingly complex ecosystems. Many of our customers outsource the manufacture of their semiconductor designs to foundries. Our customers also frequently incorporate third-party IP, whether provided by us or other vendors, into their designs to improve the efficiency of their design process. We work closely with major foundries to ensure that our EDA, IP, and manufacturing solutions are compatible with their manufacturing processes. Similarly, we work closely with other major providers of semiconductor IP, particularly microprocessor IP, to optimize our EDA tools for use with their IP designs and to assure that their IP and our own IP products, which may each provide for the design of separate components on the same chip, work effectively together. If we fail to optimize our EDA and IP solutions for use with major foundries' manufacturing processes or major IP providers' products, or if our access to such foundry processes or third-party IP products is hampered, then our solutions may become less desirable to our customers, resulting in an adverse effect on our business and financial condition.

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

Acquisitions are an important part of our growth strategy. We have completed a significant number of acquisitions in recent years, including the recent acquisitions of Magma Design Automation, Inc. (Magma), SpringSoft, Inc. and Emulation & Verification Engineering S.A. (EVE).

We expect to make additional acquisitions in the future, but we may not find suitable acquisition targets or we may not be able to consummate desired acquisitions due to unfavorable credit markets or other risks, which could harm our operating results. Acquisitions are difficult, time consuming, and pose a number of risks, including:

- Potential negative impact on our earnings per share;
- · Failure of acquired products to achieve projected sales;
- · Problems in integrating the acquired products with our products;
- · Difficulties entering into new market segments in which we are not experienced;
- Potential downward pressure on operating margins due to lower operating margins of acquired businesses, increased headcount costs and other expenses associated with adding and supporting new products;
- · Difficulties in retaining and integrating key employees;
- Failure to realize expected synergies or cost savings;
- Dilution of our current stockholders through the issuance of common stock, a substantial reduction of our cash resources and/or the incurrence of debt;

- Assumption of unknown liabilities, including tax and litigation, and the related expenses and diversion of resources:
- Disruption of ongoing business operations, including diversion of management's attention;
- Potential negative impact on our relationships with customers, distributors and business partners; and
- Negative impact on our earnings resulting from the application of ASC 805, Business Combinations.

If we do not manage these risks, the acquisitions that we complete may have an adverse effect on our business and financial condition. For instance, if we are unable to successfully integrate Magma products and technology, we may not be able to achieve the anticipated revenue growth from our Magma acquisition. In addition, expenses associated with supporting Magma's products could result in less expense synergies than anticipated. The integration process may involve significant management time and create uncertainty for employees and customers, and delays in the process could have a material adverse effect on our revenues, expenses, operating results and financial condition. Additionally, if we determine we cannot use or sell the acquired products or technology, we will be required to write down the associated intangible assets, which would negatively impact our operating results.

### Consolidation among our customers, as well as within the industries in which we operate, may negatively impact our operating results.

A number of business combinations, including mergers, asset acquisitions and strategic partnerships, among our customers and in the semiconductor and electronics industries have occurred recently, and more could occur in the future. Consolidation among our customers could lead to fewer customers or the loss of customers, increased customer bargaining power, or reduced customer spending on software and services. Moreover, business combinations within the industries in which we compete may result in stronger competition from companies that are better able to compete as sole source vendors to customers. The loss of customers or reduced customer spending could adversely affect our business and financial condition.

In addition, we and our competitors from time to time acquire business and technologies to complement and expand our respective product offerings. If any of our competitors consolidate or acquire businesses and technologies which we do not offer, they may be able to offer a larger technology portfolio, a larger support and service capability, or lower prices, which could negatively impact our business and operating results.

# Changes in accounting principles or standards, or in the way they are applied, could result in unfavorable accounting charges or effects and unexpected financial reporting fluctuations, and could adversely affect our reported operating results.

We prepare our consolidated financial statements in conformity with U.S. Generally Accepted Accounting Principles (GAAP). These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles and guidance. A change in existing principles or guidance can have a significant effect on our reported results and may retroactively affect previously reported results. Additionally, proposed accounting standards could have a significant impact on our operational processes, revenues and expenses, and could cause unexpected financial reporting fluctuations.

For example, the Financial Accounting Standards Board (FASB) is currently working together with the International Accounting Standards Board (IASB) to converge certain accounting principles and facilitate more comparable financial reporting between companies that are required to follow GAAP and those that are required to follow International Financial Reporting Standards (IFRS). These efforts

may result in different accounting principles under GAAP, which may have a material impact on the way in which we report financial results in areas including, but not limited to, revenue recognition, lease accounting, and financial statement presentation. The SEC may make a determination in the future regarding the incorporation of IFRS into the financial reporting system for U.S. companies. A change in accounting principles from GAAP to IFRS or to converged accounting principles may have a material impact on our financial statements and may retroactively adversely affect previously reported transactions.

#### Our operating results may fluctuate in the future, which may adversely affect our stock price.

Our operating results are subject to quarterly and annual fluctuations, which may adversely affect our stock price. Our historical results should not be viewed as indicative of our future performance due to these periodic fluctuations. Many factors may cause our revenue or earnings to fluctuate, including:

- Changes in demand for our products due to fluctuations in demand for our customers' products and due to constraints in our customers' budgets for research and development and EDA products and services;
- Product competition in the EDA industry, which can change rapidly due to industry or customer consolidation and technological innovation;
- Our ability to innovate and introduce new products and services or effectively integrate products and technologies that we acquire;
- Failures or delays in completing sales due to our lengthy sales cycle, which often includes a substantial customer evaluation and approval process because of the complexity of our products and services;
- Cancellations or changes to levels of license orders or the mix between upfront revenue and time-based license revenue;
- · Our ability to implement effective cost control measures;
- Delay of one or more orders for a particular period, particularly orders generating upfront revenue;
- Our dependence on a relatively small number of large customers for a large portion of our revenue;
- Changes in or challenges to our revenue recognition model;
- Amendments or renewals of customer contracts which provide discounts or require the deferral of revenue to later periods;
- Expenses related to our acquisition and integration of businesses and technology;
- Delays, increased costs or quality issues resulting from our reliance on third parties to manufacture our hardware products; and
- General economic and political conditions that affect the semiconductor and electronics industries.

These factors, or any other factors or risks discussed herein, could negatively impact our revenue or earnings and cause our stock price to decline.

We operate in highly competitive industries, and if we do not continue to meet our customers' demand for innovative technology at lower costs, our business and financial condition will be harmed.

We compete against EDA vendors that offer a variety of products and services, such as Cadence Design Systems, Inc. and Mentor Graphics Corporation. We also compete with other EDA vendors, including frequent new entrants to the marketplace, that offer products focused on one or more

discrete phases of the IC design process, as well as vendors of IP products and system-level solutions. Moreover, our customers internally develop design tools and capabilities that compete with our products.

The industries in which we operate are highly competitive and the demand for our products and services is dynamic and depends on a number of factors, including demand for our customers' products, design starts and our customers' budgetary constraints. Technology in these industries evolves rapidly and is characterized by frequent product introductions and improvements and changes in industry standards and customer requirements. Semiconductor device functionality requirements continually increase while feature widths decrease, substantially increasing the complexity, cost and risk of chip design and manufacturing. At the same time, our customers and potential customers continue to demand an overall lower total cost of design, which can lead to the consolidation of their purchases with one vendor. In order to succeed in this environment, we must successfully meet our customers' technology requirements and increase the value of our products, while also striving to reduce their overall costs and our own operating costs.

We compete principally on the basis of technology, product quality and features (including ease-of-use), license or usage terms, post-contract customer support, interoperability among products, and price and payment terms. Specifically, we believe the following competitive factors affect our success:

- Our ability to anticipate and lead critical development cycles, innovate rapidly and efficiently, improve our existing products, and successfully develop or acquire new products;
- Our ability to offer products that provide both a high level of integration into a comprehensive platform and a high level of individual product performance;
- Our ability to enhance the value of our offering through more favorable terms such as
  expanded license usage, future purchase rights, price discounts and other unique rights, such
  as multiple tool copies, post-contract customer support, and the ability to purchase pools of
  technology; and
- · Our ability to compete on the basis of payment terms.

If we fail to successfully manage these competitive factors, fail to successfully balance the conflicting demands for innovative technology and lower overall costs, or fail to address new competitive forces, our business and financial condition will be adversely affected.

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

Our success depends in part upon protecting our proprietary technology. Our efforts to protect our technology may be costly and unsuccessful. We rely on agreements with customers, employees and others and on intellectual property laws worldwide to protect our proprietary technology. These agreements may be breached, and we may not have adequate remedies for any breach. Additionally, despite our measures to prevent piracy, other parties may attempt to illegally copy or use our products, which could result in lost revenue. Some foreign countries do not currently provide effective legal protection for intellectual property and our ability to prevent the unauthorized use of our products in those countries is therefore limited. Our trade secrets may also otherwise become known or be independently developed by competitors.

We may need to commence litigation or other legal proceedings in order to:

- Assert claims of infringement of our intellectual property;
- · Defend our products from piracy;
- · Protect our trade secrets or know-how; or
- · Determine the enforceability, scope and validity of the propriety rights of others.

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

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

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions. A change in the tax law in the jurisdictions in which we do business, including an increase in tax rates or an adverse change in the treatment of an item of income or expense, could result in a material increase in our tax expense. Currently, a substantial portion of our revenue is generated from customers located outside the United States, and a substantial portion of our assets, including employees, are located outside the United States. United States income taxes and foreign withholding taxes have not been provided on undistributed earnings for certain non-United States subsidiaries to the extent such earnings are considered to be indefinitely reinvested in the operations of those subsidiaries. A number of proposals for broad reform of the corporate tax system in the U.S. are under evaluation by various legislative and administrative bodies but it is not possible to determine accurately the overall impact of such proposals on our effective tax rate at this time.

Our tax filings are subject to review or audit by the Internal Revenue Service and state, local and foreign taxing authorities. We exercise judgment in determining our worldwide provision for income taxes and, in the ordinary course of our business, there may be transactions and calculations where the ultimate tax determination is uncertain. We are also liable for potential tax liabilities of businesses we acquire. Although we believe our tax estimates are reasonable, we can provide no assurance that any final determination in an audit will not be materially different than the treatment reflected in our historical income tax provisions and accruals. An assessment of additional taxes as a result of an audit could adversely affect our income tax provision and net income in the period or periods for which that determination is made.

We have operations in the United States and in multiple foreign jurisdictions with a wide range of statutory tax rates. Therefore, any changes in our geographical earnings mix in various tax jurisdictions, including those resulting from transfer pricing adjustments, could materially impact our effective tax rate. Furthermore, we maintain significant deferred tax assets related to federal research credits and foreign tax credits and certain state tax credits. Our ability to use these credits is dependent upon having sufficient future taxable income, including foreign source income in the United States, as well as sufficient taxable income in certain states. Changes in our forecasts of future income could result in an adjustment to the deferred tax asset and a related charge to earnings which could materially affect our financial results.

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

We devote substantial resources to research and development. New competitors, technological advances by existing competitors, our acquisitions, our entry into new markets, or other competitive factors may require us to invest significantly greater resources than we anticipate. If we are required to invest significantly greater resources than anticipated without a corresponding increase in revenue, our operating results could decline. Additionally, our periodic research and development expenses may be independent of our level of revenue which could negatively impact our financial results. Finally, there can be no guarantee that our research and development investments will result in products that create significant, or even any, revenue.

### The global nature of our operations exposes us to increased risks and compliance obligations which may adversely affect our business.

We derive more than half of our revenue from sales outside the United States, and we expect our orders and revenue to continue to depend on sales to customers outside the United States. In addition, we have expanded our non-U.S. operations significantly in the past several years. This strategy requires us to recruit and retain qualified technical and managerial employees, manage multiple, remote locations performing complex software development projects and ensure intellectual property protection outside of the United States. Our international operations and sales subject us to a number of increased risks, including:

- International economic and political conditions, such as political tensions between countries in which we do business;
- · Difficulties in adapting to cultural differences in the conduct of business;
- Ineffective legal protection of intellectual property rights;
- Financial risks such as longer payment cycles and difficulty in collecting accounts receivable;
- · Inadequate local infrastructure that could result in business disruptions;
- · Government trade restrictions, including tariffs or other trade barriers;
- · Additional taxes and penalties; and
- Other factors beyond our control such as natural disasters, terrorism, civil unrest, war and infectious diseases.

If any of the foreign economies in which we do business deteriorate or if we fail to effectively manage our global operations, our business and results of operations will be harmed.

In addition, our global operations are subject to numerous U.S. and foreign laws and regulations, including those related to anti-corruption, tax, corporate governance, imports and exports, financial and other disclosures, privacy and labor relations. These laws and regulations are complex and may have differing or conflicting legal standards, making compliance difficult and costly. If we violate these laws and regulations we could be subject to fines, penalties or criminal sanctions, and may be prohibited from conducting business in one or more countries. Although we have implemented policies and procedures to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors or agents will not violate these laws and regulations. Any violation individually or in the aggregate could have a material adverse effect on our operations and financial condition.

Our financial statements are also affected by fluctuations in foreign currency exchange rates. A weakening U.S. dollar relative to other currencies increases expenses of our foreign subsidiaries when they are translated into U.S. dollars in our consolidated statement of operations. Likewise, a strengthening U.S. dollar relative to other currencies, especially the Japanese yen, reduces revenue of our foreign subsidiaries upon translation and consolidation. Exchange rates are subject to significant and rapid fluctuations, and therefore we cannot predict the prospective impact of exchange rate fluctuations. Although we engage in foreign currency hedging activity, we may be unable to hedge all of our foreign currency risk, which could have a negative impact on our results of operations.

### Liquidity requirements in our U.S. operations may require us to raise cash in uncertain capital markets, which could negatively affect our financial condition.

As of December 7, 2012, we have outstanding debt of \$135.0 million under our term loan facility, primarily as a result of funding our Magma acquisition. Most of our worldwide cash, cash equivalents and short term investments balance is held in subsidiary accounts outside the United States—approximately 72% as of October 31, 2012. In addition, typically about half of our operating cash flow is received by our overseas subsidiaries. Should our cash spending needs in the United States rise and exceed our existing U.S. balances, available credit under our revolving credit and term loan

facilities, and future U.S. cash flows, we may be required to incur additional debt at higher than anticipated interest rates or access other funding sources, which could negatively affect our results of operations, capital structure and/or the market price of our common stock.

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

We are from time to time subject to claims alleging our infringement of third party intellectual property rights, including patent rights. For example, in December 2011, a patent infringement lawsuit was filed against us by Dynetix Design Solutions, Inc., which seeks, among other things, compensatory damages and a permanent injunction. We may also acquire companies that are party to existing infringement claims. For example, EVE, a company we acquired in October 2012, is a party to ongoing patent infringement lawsuits involving Mentor Graphics Corporation. Further information regarding the Dynetix and EVE lawsuits is contained in Part I, Item 3, *Legal Proceedings*. In addition, under our customer agreements and other license agreements, we agree in many cases to indemnify our customers if our products infringe a third party's intellectual property rights. Infringement claims can result in costly and time-consuming litigation, require us to enter into royalty arrangements, subject us to damages or injunctions restricting our sale of products, invalidate a patent or family of patents, require us to refund license fees to our customers or to forgo future payments or require us to redesign certain of our products, any one of which could harm our business and operating results.

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

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

#### We may be subject to litigation proceedings that could harm our business.

We may be subject to legal claims or regulatory matters involving stockholder, consumer, competition, and other issues on a global basis. Litigation is subject to inherent uncertainties, and unfavorable rulings could occur. An unfavorable ruling could include monetary damages or, in cases for which injunctive relief is sought, an injunction prohibiting us from manufacturing or selling one or more products. If we were to receive an unfavorable ruling on a matter, our business and results of operations could be materially harmed. Further information regarding material pending lawsuits, other than ordinary routine litigation incidental to our business, is contained in Part I, Item 3, *Legal Proceedings*.

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

We depend in large part upon the services of key members of our senior management team to drive our future success. If we were to lose the services of any member of our senior management team, our business could be adversely affected. To be successful, we must also 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 and has increased. Our employees are often recruited aggressively by our competitors and our customers. Any failure to recruit and retain key technical, sales and managerial

employees could harm our business, results of operations and financial condition. Additionally, efforts to recruit and retain qualified employees could be costly and negatively impact our operating expenses.

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

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

We are subject to changing rules and regulations promulgated by a number of governmental and self-regulated organizations, including the SEC, the NASDAQ Stock Market, and the FASB. These rules and regulations continue to evolve in scope and complexity and many new requirements have been created in response to laws enacted by Congress, making compliance more difficult and uncertain. For example, Congress recently passed the Dodd-Frank Wall Street Reform and Consumer Protection Act. Our efforts to comply with the Dodd-Frank Act and other 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.

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

Regardless of how well designed and operated it is, a control system can provide only reasonable assurance that its objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Failure of our control systems to prevent error or fraud could have a material adverse impact on our business.

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

Our cash equivalent and short-term investment portfolio currently consists of tax-exempt money market mutual funds, taxable money market mutual funds and bank deposits. Our investment portfolio carries both interest rate risk and credit risk. Fixed rate debt securities may have their market value adversely impacted due to a credit downgrade or a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall or a credit downgrade occurs. As a result of current adverse financial market conditions, capital pressures on certain banks, especially in Europe, and the continuing low interest rate environment, some of our financial instruments may become impaired. Our future investment income may fall short of expectations due to changes in interest rates or if the decline in fair value of our publicly traded debt or equity investments is judged to be other-than-temporary. In addition, we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in the issuer's credit quality or changes in interest rates.

### Security breaches could compromise sensitive information belonging to us or our customers and could harm our business and reputation.

We store sensitive data, including intellectual property, our proprietary business information and that of our customers, and confidential employee information, in our data centers and on our networks. Despite our security measures, our information technology and infrastructure may be vulnerable to

attacks by hackers or breached due to employee error, malfeasance or other disruptions that could result in unauthorized disclosure or loss of sensitive information. Furthermore, in the operation of our business we also use third party vendors that store certain sensitive data, including confidential information about our employees, and these third parties are subject to their own cybersecurity threats. Any security breach of our own or a third party vendor's systems could cause us to be non-compliant with applicable laws or regulations, subject us to legal claims or proceedings, disrupt our operations, damage our reputation, and cause a loss of confidence in our products and services, any of which could adversely affect our business.

In preparing our financial statements we make certain assumptions, judgments and estimates that affect amounts reported in our consolidated financial statements, which, if not accurate, may significantly impact our financial results.

We make assumptions, judgments and estimates for a number of items, including the fair value of financial instruments, goodwill, long-lived assets and other intangible assets, the realizability of deferred tax assets, the recognition of revenue and the fair value of stock awards. We also make assumptions, judgments and estimates in determining the accruals for employee related liabilities, including commissions and variable compensation, and in determining the accruals for uncertain tax positions, allowances for doubtful accounts, and legal contingencies. These assumptions, judgments and estimates are drawn from historical experience and various other factors that we believe are reasonable under the circumstances as of the date of the consolidated financial statements. Actual results could differ materially from our estimates, and such differences could significantly impact our financial results.

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

Due to the global nature of our business, our operating results may be negatively impacted by catastrophic events throughout the world. We rely on a global network of infrastructure applications, enterprise applications and technology systems for our development, marketing, operational, support and sales activities. A disruption or failure of these systems in the event of a major earthquake, fire, telecommunications failure, cybersecurity attack, terrorist attack, or other catastrophic event could cause system interruptions, delays in our product development and loss of critical data and could prevent us from fulfilling our customers' orders. Moreover, our corporate headquarters, a significant portion of our research and development activities, our data centers, and certain other critical business operations are located in California, near major earthquake faults. A catastrophic event that results in the destruction or disruption of our data centers or our critical business or information technology systems would severely affect our ability to conduct normal business operations and, as a result, our operating results would be adversely affected.

#### Item 1B. Unresolved Staff Comments

None.

#### Item 2. Properties

Our principal offices are located in four adjacent buildings in Mountain View, California, which together provide approximately 400,000 square feet of available space. This space is leased through February 2015. We also lease approximately 237,000 square feet of space in three separate buildings in Sunnyvale, California, with lease expiration dates ranging from September 2019 to October 2019. We own one building in Sunnyvale, California with approximately 120,000 square feet of space. These buildings in Mountain View and Sunnyvale are used for research and development, sales and support, marketing, and administrative activities.

In addition, in October 2011, we agreed to lease two office buildings to be constructed in Mountain View, California. Once construction is complete, the buildings together will provide approximately

341,000 square feet. The lease of such premises begins upon the later of March 1, 2015 or six months after construction is substantially completed. We may terminate the lease prior to such time if certain conditions occur.

We currently lease 25 other offices throughout the United States, and own 2 office buildings in Oregon, primarily for sales and support activities.

#### **International Facilities**

We lease additional space for sales, service and research and development activities in approximately 30 countries throughout the world, including 45,000 square feet in Dublin, Ireland for our international headquarters, as well as significant sites in Yerevan, Armenia, Bangalore, India and Shanghai, China.

We believe that our existing facilities, including both owned and leased properties, are in good condition and suitable for the current conduct of our business.

#### Item 3. Legal Proceedings

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

In connection with our definitive merger agreement to acquire Magma, four putative stockholder class actions were filed against Magma, Magma's board of directors, Synopsys and the Synopsys merger subsidiary on December 5, 2011, December 9, 2011, December 13, 2011, and December 19, 2011, in state court in California and Delaware, and the cases were consolidated in California state court (collectively, the Magma Lawsuits). The Magma Lawsuits allege, among other things, that Magma and its directors breached their fiduciary duties to Magma's stockholders in negotiating and entering into the definitive merger agreement and by agreeing to sell Magma at an unfair price, and that Magma and Synopsys aided and abetted these alleged breaches of fiduciary duties. On February 10, 2012, the parties entered into a memorandum of understanding (MOU) in which they agreed on the terms of a proposed settlement of the lawsuits, which would include the dismissal with prejudice of all claims against all of the defendants. Pursuant to the MOU, Magma agreed to make certain additional disclosures concerning Magma's acquisition by Synopsys, which supplemented the information provided in Magma's proxy statement filed with the Securities and Exchange Commission on January 10, 2012, and to pay certain legal fees and expenses of plaintiffs' counsel. As contemplated by the MOU, the parties entered into a stipulation of settlement, which is subject to customary conditions including court approval following notice to Magma's former stockholders. The court granted preliminary approval of such proposed settlement in September 2012. The court has scheduled a hearing regarding final approval of such proposed settlement for January 25, 2013.

On December 5, 2011, plaintiff Dynetix Design Solutions, Inc. (Dynetix) filed a patent infringement lawsuit against Synopsys in federal district court in the Northern District of California. The lawsuit alleges, among other things, that our VCS functional verification tool, and more specifically our VCS multicore technology and VCS Cloud product, infringes Dynetix's United States Patent No. 6,466,898, and that such infringement is willful. The lawsuit seeks, among other things, compensatory damages and a permanent injunction. We have asserted patent infringement counterclaims against Dynetix based on its two verification products. The court held a claims construction hearing regarding the Dynetix patent in October 2012 and accepted a majority of the constructions submitted by Synopsys.

We acquired Emulation & Verification Engineering S.A. (EVE) on October 4, 2012. EVE and EVE-USA, Inc. (collectively, the EVE Parties) are currently defendants in three patent infringement

lawsuits filed by Mentor Graphics Corporation (Mentor). Mentor filed suit against the EVE Parties in federal district court in the District of Oregon on August 16, 2010 alleging that EVE's ZeBu series of products infringes Mentor's United States Patent No. 6,876,962. Mentor filed an additional suit in federal district court in the District of Oregon on August 17, 2012 alleging that EVE's ZeBu series of products infringes Mentor's United States Patent No. 6,947,882. Both cases have been consolidated in federal district court in the District of Oregon and seek compensatory damages and a permanent injunction. Mentor also filed a patent infringement lawsuit against Nihon EVE K.K. in Tokyo District Court in 2010 alleging that EVE's ZeBu series of products infringes Mentor's Japanese Patent No. P3,588,324. This case seeks compensatory damages, a permanent injunction and destruction of inventory.

On September 27, 2012, Synopsys, EVE and EVE-USA, Inc. filed an action for declaratory relief against Mentor in federal district court in the Northern District of California, seeking a determination that Mentor's United States Patents Nos. 6,009,531, 5,649,176 and 6,240,376, which were the subject of a patent infringement lawsuit filed by Mentor against EVE in 2006 and settled in the same year, are invalid and not infringed by EVE's products, and that Mentor is without right or authority to threaten or maintain suit against the plaintiffs on such patents. In addition, on September 26, 2012, we filed two *inter partes* review requests with the U.S. Patent and Trademark Office challenging the validity of Mentor's '376 and '882 patents.

#### Item 4. Mine Safety Disclosures

None.

#### PART II

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

#### **Common Stock Market Price**

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

	Quarter Ended						
	January 31,	April 30,	July 31,	October 31,			
2012:							
High	\$29.63	\$31.04	\$31.07	\$34.10			
Low	\$26.10	\$29.06	\$27.49	\$30.29			
2011:							
High	\$27.60	\$29.35	\$27.90	\$27.49			
Low	\$24.46	\$25.85	\$23.51	\$21.37			

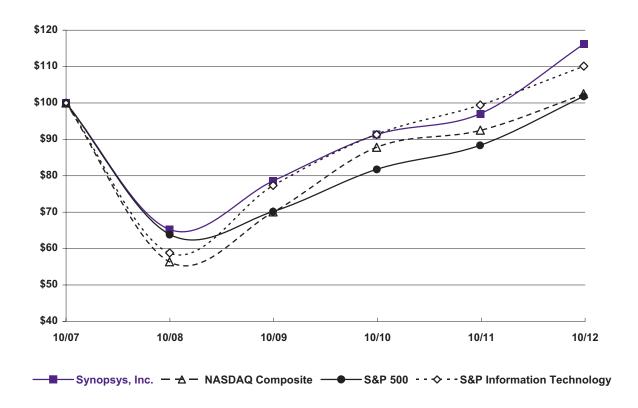
As of October 31, 2012, we had 384 stockholders of record. To date, we have paid no cash dividends on our capital stock and have no current intention to do so. Our credit facility contains financial covenants requiring us to maintain certain specified levels of cash and cash equivalents. Such provisions could have the effect of preventing us from paying dividends in the future. See Note 5 of *Notes to Consolidated Financial Statements* for further information regarding our credit facility.

#### Performance graph

The following graph compares the 5-year total return to stockholders of our common stock relative to the cumulative total returns of the S&P 500 Index, the S&P Information Technology Index and the NASDAQ Composite Index. The graph assumes that \$100 was invested in Synopsys common stock on November 2, 2007 (the last trading day before the beginning of our fifth preceding fiscal year) and in each of the indexes on October 31, 2007 (the closest month end) and that all dividends were reinvested. No cash dividends were declared on our common stock during such time. The comparisons in the table are required by the SEC and are not intended to forecast or be indicative of possible future performance of our common stock.

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

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



<sup>\*\$100</sup> invested on 11/2/07 in stock or 10/31/07 in index, including reinvestment of dividends. Indexes calculated on month-end basis. Stock calculated on fiscal year-end basis.

Copyright© 2012 S&P, a division of The McGraw-Hill Companies Inc. All rights reserved.

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

#### **Stock Repurchase Program**

Our Board of Directors (Board) previously approved a stock repurchase program pursuant to which we were authorized to purchase up to \$500.0 million of our common stock, and has periodically replenished the stock repurchase program to such amount. Our Board replenished the stock repurchase program up to \$500.0 million on May 25, 2011. We repurchase shares to offset dilution caused by ongoing stock issuances from existing equity plans for equity compensation awards, acquisitions, and when management believes it is a good use of cash. Repurchases are transacted in accordance with Rule 10b-18 of the Securities Exchange Act of 1934 (Exchange Act) and may be made through any means including, but not limited to, open market purchases, plans executed under Rule 10b5-1(c) of the Exchange Act and structured transactions. We did not repurchase any shares of our common stock during the three months ended October 31, 2012 and, as of such date, \$272.4 million remained available for further repurchases under the program.

See Note 8 of *Notes to Consolidated Financial Statements* for further information regarding our stock repurchase program.

Item 6. Selected Financial Data	1							
	Fiscal Year Ended October 31,(1)(2)							
	2012	2011	2010	2009	2008			
		(in thousa	nds, except per s	hare data)				
Revenue	\$1,756,017	\$1,535,643	\$1,380,661	\$1,360,045	\$1,336,951			
Income before provisions for								
income taxes	201,135	219,113	198,658	233,070	218,956			
(Benefit) provision for income								
taxes(3)	18,733	(2,251)	(38,405)	65,389	28,978			
Net income	182,402	221,364	237,063	167,681	189,978			
Net income per share:								
Basic	1.24	1.51	1.60	1.17	1.33			
Diluted	1.21	1.47	1.56	1.15	1.29			
Working capital	(111,983)	327,735	325,987	649,207	413,307			
Total assets	4,147,656	3,368,844	3,286,541	2,938,854	2,742,478			
Stockholders' equity(4)	2,543,971	2,101,300	2,100,182	1,844,166	1,528,371			

<sup>(1)</sup> Our fiscal year generally ends on the Saturday nearest to October 31 and consists of 52 weeks, with the exception that approximately every five years, we have a 53-week year. Fiscal 2012 was a 53-week year and ended on November 3, 2012. Fiscal 2011, 2010, 2009, and 2008 were 52-week years. Fiscal 2013 will be a 52-week year.

<sup>(2)</sup> Includes results of operations from business combinations from the date of acquisition. See Note 3 of *Notes to Consolidated Financial Statements*.

<sup>(3)</sup> Includes \$36.9 million, \$32.8 million, \$94.3 million and \$17.3 million tax benefit from tax settlements received in fiscal 2012, fiscal 2011, fiscal 2010 and fiscal 2008, respectively. See Note 10 of *Notes to Consolidated Financial Statements*.

<sup>(4)</sup> Fiscal 2008 included an adjustment to the beginning balance of retained earnings as a result of the accounting guidance for uncertainty in income taxes.

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

#### **Overview**

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

#### **Business Summary**

Synopsys is a global leader in providing software, intellectual property and services used to accelerate innovation in integrated circuits and electronic systems. We supply the electronic design automation (EDA) software that engineers use to design, create prototypes for and test integrated circuits, also known as chips. We also supply software and hardware used to develop the systems that incorporate integrated circuits and the software that runs on those integrated circuits. Our intellectual property (IP) products are pre-designed circuits that engineers use as components of larger chip designs rather than redesigning those circuits themselves. To complement these product offerings, we provide technical services to support our solutions and we help our customers develop chips and electronic systems.

Our customers are generally large semiconductor and electronics manufacturers. Our solutions help them overcome the challenge of developing increasingly advanced electronics products while reducing their design and manufacturing costs. While our products are an important part of our customers' development process, our customers' research and development budget and spending decisions may be impacted by their business outlook and their willingness to invest in new and increasingly complex chip designs.

Despite global economic uncertainty, we have maintained profitability and positive cash flow on an annual basis in recent years. We achieved these results not only because of our solid execution, leading technology and strong customer relationships, but also because of our recurring revenue business model. Under this model, a substantial majority of our customers pay for their licenses over time and we typically recognize this recurring revenue over the life of the contract, which averages approximately three years. Recurring revenue generally represents more than 90% of our total revenue. The revenue we recognize in a particular period generally results from selling efforts in prior periods rather than the current period. We typically enter each quarter with greater than 90% of our revenue for that particular quarter already committed from our customers, providing for stability and predictability of results. Due to our business model, decreases as well as increases in customer spending do not immediately affect our revenues in a significant way.

Even with the continued instability of the global markets, our business outlook remains strong based on our business model, strong financials, diligent expense management, and acquisition strategy. In addition, consumer demand for electronics has been solid, particularly the demand for mobile devices. Through our recent acquisitions, we have enhanced our technology and expanded our product portfolio and our total addressable market, especially in IP and system-level solutions, which we believe will help drive revenue growth. We believe that the combination of our solid financials, leading technology and strong customer relationships will help us to continue to successfully execute our strategies.

#### Fiscal 2012 Acquisitions

During the second quarter of fiscal 2012, we completed our acquisition of Magma Design Automation, Inc. (Magma), and during the fourth quarter, we completed our acquisition of Emulation &

Verification Engineering S.A. (EVE) and acquired a controlling interest in SpringSoft, Inc. (SpringSoft). As further described below, these acquisitions, combined with other acquisitions in fiscal 2012, were the primary drivers for increases in revenues and expenses compared to fiscal 2011.

#### Fiscal Year End

Our fiscal year generally ends on the Saturday nearest to October 31 and consists of 52 weeks, with the exception that approximately every five years, we have a 53-week year. When a 53-week year occurs, we include the additional week in the first quarter to realign fiscal quarters with calendar quarters. Fiscal 2012 was a 53-week year and ended on November 3, 2012. Fiscal 2011 and Fiscal 2010 were 52-week years, ending on October 29, 2011 and October 30, 2010, respectively.

The extra week in fiscal 2012 resulted in approximately \$26 million of additional revenue, related primarily to time-based licenses, and approximately \$16 million of additional expenses.

For presentation purposes, this Form 10-K refers to October 31 as the end of our fiscal year.

#### Fiscal 2012 Financial Performance Summary

Increases in our revenue and expenses were driven by the overall growth of our business, including from our acquisitions in fiscal 2012. In addition, the extra week in fiscal 2012 contributed to increases in our revenue and expenses.

- We continued to derive more than 90% of our revenue from time-based licenses, maintenance and services.
- Our total revenue, excluding the impact of the extra week in fiscal 2012 that added \$26 million, increased by \$194.4 million primarily due to our general growth and acquisitions during fiscal 2012.
- Total operating expense and cost of revenues, excluding the impact of the extra week in fiscal 2012 that resulted in \$16 million in expenses, increased by \$227.2 million primarily due to employee-related costs as a result of an almost 20% higher headcount principally from acquisitions; higher amortization and depreciation expenses; and other expenses that are related solely to acquisitions and do not regularly reoccur in the operation of our business.
- Income tax provisions for fiscal 2012 increased by \$21.0 million. The increase was primarily due to the expiration of the federal R&D tax credit after December 31, 2011 and a shift in the geographical mix of our earnings that resulted in a lower tax benefit from foreign earnings taxed below the U.S. statutory rate in fiscal 2012 compared to fiscal 2011.
- As a result of the increase in expenses due to our fiscal 2012 acquisitions, and increased taxes, our net income was lower by \$39.0 million in fiscal 2012 compared to 2011.

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

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

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

· Revenue recognition;

- Valuation of stock compensation;
- · Valuation of intangible assets; and
- Income taxes.

#### Revenue Recognition

Software license revenue consists of fees associated with the licensing of our software. Maintenance and service revenue consists of maintenance fees associated with perpetual and term licenses and professional services fees. Hardware revenue consists of Field Programmable Gate Array (FPGA) board-based products.

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

- Technology Subscription Licenses (TSLs). TSLs are time-based licenses for a finite term, and generally provide the customer limited rights to receive, or to exchange certain quantities of licensed software for, unspecified future technology. We bundle and do not charge separately for post-contract customer support (maintenance) for the term of the license.
- Term licenses. Term licenses are also for a finite term, but do not provide the customer any
  rights to receive, or to exchange licensed software for, unspecified future technology.
  Customers purchase maintenance separately for the first year and may renew annually for the
  balance of the term. The annual maintenance fee is typically calculated as a percentage of the
  net license fee.
- Perpetual licenses. Perpetual licenses continue as long as the customer renews maintenance plus an additional 20 years. Perpetual licenses do not provide the customer any rights to receive, or to exchange licensed software for, unspecified future technology. Customers purchase maintenance separately for the first year and may renew annually.

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

- *TSLs.* We typically recognize revenue from TSL fees (which include bundled maintenance) ratably over the term of the license period, or as customer installments become due and payable, whichever is later. Revenue attributable to TSLs is reported as "time-based license revenue" in the consolidated statements of operations.
- Term licenses. We recognize revenue from term licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee and 100% of the maintenance fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these term licenses is reported as "upfront revenue" in the consolidated statements of operations. For term licenses in which less than 75% of the license fee and 100% of the maintenance fee is payable within one year from shipment, we recognize revenue as customer payments become due and payable. Such revenue is reported as "time-based license revenue" in the consolidated statements of operations.
- Perpetual licenses. We recognize revenue from perpetual licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee and 100% of the maintenance fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these perpetual licenses is reported as "upfront revenue" in the consolidated statements of operations. For perpetual licenses in which less than 75% of the license fee and 100% of the maintenance fee is payable within one year from shipment, we recognize revenue as customer installments become due and payable. Such revenue is reported as "time-based license revenue" in the consolidated statements of operations.

We also enter into arrangements in which portions of revenue are contingent upon the occurrence of uncertain future events, for example, royalty arrangements. We refer to this revenue as "contingent

revenue." Contingent revenue is recognized if and when the applicable event occurs. Such revenue is reported as "time-based revenue" in the consolidated statements of operations. Historically, these arrangements have not been material to our total revenue.

We recognize revenue from hardware sales in full upon shipment if all other revenue recognition criteria are met. Revenue attributable to these hardware sales is reported as "upfront revenue" in the consolidated statements of operations. Hardware sales have not been material to our total revenue.

We infrequently enter into multiple-element arrangements that contain both software and non-software deliverables such as hardware. On a prospective basis beginning in the first quarter of fiscal 2011, we applied accounting guidance for revenue arrangements with multiple deliverables to these contracts. Such arrangements have not had a material effect on our consolidated financial statements and are not expected to have a material effect on subsequent periods.

We have determined that the software and non-software deliverables in our contracts are separate units of accounting. Accordingly, we allocate the arrangement consideration to separate units of accounting based on estimated standalone selling prices (ESP) because we do not have objective evidence of standalone selling prices. We estimate the standalone selling prices of our separate units of accounting considering both market conditions and our own specific conditions. For hardware deliverables, we determine ESP using gross margin because we have consistent pricing practices and gross margins for these products. Determining the ESP for software deliverables requires significant judgment. We determine ESP for software deliverables after considering customer geographies, market demand and competition at the time of contract negotiation, gross margin objectives, existing portfolio pricing practices, contractually stated prices and prices for similar historical transactions.

We recognize revenue for the separate units of accounting when all revenue recognition criteria are met. Revenue allocated to hardware units of accounting is recognized upon shipment when all other revenue recognition criteria are met. Revenue allocated to software units of accounting is recognized according to the methods described above depending on the software license type (TSL, term license or perpetual license).

We recognize revenue from maintenance fees ratably over the maintenance period to the extent cash has been received or fees become due and payable, and recognize revenue from professional services and training fees as such services are performed and accepted by the customer. Revenue attributable to maintenance, professional services and training is reported as "maintenance and service revenue" in the consolidated statements of operations.

We also enter into arrangements to deliver software products, either alone or together with other products or services that require significant modification, or customization of the software. We account for such arrangements using the percentage of completion method as we have the ability to make reasonably dependable estimates that relate to the extent of progress toward completion, contract revenues and costs. We measure the progress towards completion using the labor hours incurred to complete the project. Revenue attributable to these arrangements is reported as maintenance and service revenue in the consolidated statements of operations.

We determine the fair value of each element in multiple element software arrangements that contain only software and software related deliverables based on vendor-specific objective evidence (VSOE). We limit our assessment of VSOE of fair value for each element to the price charged when such element is sold separately. We have analyzed all of the elements included in our multiple-element software arrangements and have determined that we have sufficient VSOE to allocate revenue to the maintenance components of our perpetual and term license products and to professional services. Accordingly, assuming all other revenue recognition criteria are met, we recognize license revenue from perpetual and term licenses upon delivery using the residual method, recognize revenue from maintenance ratably over the maintenance term, and recognize revenue from professional services as

services are performed and accepted by the customer. We recognize revenue from TSLs ratably over the term of the license, assuming all other revenue recognition criteria are met, since there is not sufficient VSOE to allocate the TSL fee between license and maintenance services.

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

- Persuasive Evidence of an Arrangement Exists. Prior to recognizing revenue on an
  arrangement, our customary policy is to have a written contract, signed by both the customer
  and by us or a purchase order from those customers that have previously negotiated a
  standard end-user license arrangement or purchase agreement.
- Delivery Has Occurred. We deliver our products to our customers electronically or physically. For electronic deliveries, delivery occurs when we provide access to our customers to take immediate possession of the software through downloading it to the customer's hardware. For physical deliveries, the standard transfer terms are typically Freight on Board (FOB) shipping point. We generally ship our products or license keys promptly after acceptance of customer orders. However, a number of factors can affect the timing of product shipments and, as a result, timing of revenue recognition, including the delivery dates requested by customers and our operational capacity to fulfill product orders at the end of a fiscal quarter.
- The Fee is Fixed or Determinable. Our determination that an arrangement fee is fixed or determinable depends principally on the arrangement's payment terms. Our standard payment terms for perpetual and term licenses require 75% or more of the license fee and 100% of the maintenance fee to be paid within one year. If the arrangement includes these terms, we regard the fee as fixed or determinable, and recognize all license revenue under the arrangement in full upon delivery (assuming all other revenue recognition criteria are met). If the arrangement does not include these terms, we do not consider the fee to be fixed or determinable and generally recognize revenue when customer installments are due and payable. In the case of a TSL, because of the right to exchange products or receive unspecified future technology and because VSOE for maintenance services does not exist for a TSL, we recognize revenue ratably over the term of the license, but not in advance of when customers' installments become due and payable.
- Collectability is Probable. We judge collectability of the arrangement fees on a
  customer-by-customer basis pursuant to our credit review policy. We typically sell to customers
  with whom we have a history of successful collection. For a new customer, or when an existing
  customer substantially expands its commitments, 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 collectability is not probable under a particular arrangement
  based upon our credit review process or the customer's payment history, we recognize
  revenue under that arrangement as customer payments are actually received.

#### Valuation of Stock Compensation

Stock compensation expense is measured on the grant date based on the fair value of the award and is recognized as expense over the vesting period in accordance with ASC 718, *Stock Compensation*. We use the Black-Scholes option-pricing model to determine the fair value of stock options and employee stock purchase plan awards. The Black-Scholes option-pricing model incorporates various subjective assumptions including expected volatility, expected term and risk-free

interest rates. We estimate the expected volatility by a combination of implied volatility for publicly traded options of our stock with a term of six months or longer and the historical stock price volatility over the estimated expected term of our stock awards. We determine the expected term of our stock awards based on historical experience. In addition, judgment is required in estimating the forfeiture rate on stock awards. We calculate the expected forfeiture rate based on average historical trends. These input factors are subjective and are determined using management's judgment. If a difference arises between the assumptions used in determining stock compensation cost and the actual factors which become known over time, we may change the input factors used in determining future stock compensation costs. Any such changes could materially impact our results of operations in the period in which the changes are made and in periods thereafter.

#### Valuation of Intangible Assets

We evaluate our intangible assets for indications of impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Intangible assets consist of purchased technology, contract rights intangibles, customer-relationships, trademarks and trade names, covenants not to compete, capitalized software development and other intangibles. Factors that could trigger an impairment review include significant under-performance relative to expected historical or projected future operating results, significant changes in the manner of our use of the acquired assets or the strategy for our overall business or significant negative industry or economic trends. If this evaluation indicates that the value of the intangible asset may be impaired, we make an assessment of the recoverability of the net carrying value of the asset over its remaining useful life. If this assessment indicates that the intangible asset is not recoverable, based on the estimated undiscounted future cash flows of the technology over the remaining useful life, we reduce the net carrying value of the related intangible asset to fair value. Any such impairment charge could be significant and could have a material adverse effect on our reported financial results. We did not record any impairment charges on our intangible assets during fiscal 2012, 2011 or 2010.

#### Income Taxes

Our tax provisions are calculated using estimates in accordance with ASC 740, *Income Taxes*. Our estimates and assumptions may differ from the actual results as reflected in our income tax returns and we record the required adjustments when they are identified or resolved.

We recognize deferred tax assets and liabilities for the temporary differences between the book and tax bases of assets and liabilities using enacted tax rates in effect for the year in which we expect the differences to reverse, and for tax loss and credit carryovers. We record a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized. In evaluating our ability to utilize our deferred tax assets, we consider all available positive and negative evidence, including our past operating results, our forecast of future taxable income on a jurisdiction by jurisdiction basis, as well as feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we are using to manage the underlying businesses. We believe that the net deferred tax assets of approximately \$311.0 million that are recorded on our balance sheet as of October 31, 2012 will ultimately be realized. However, if we determine in the future that it is more likely than not we will not be able to realize a portion or the full amount of deferred tax assets, we would record an adjustment to the deferred tax asset valuation allowance as a charge to income tax expense in the period such determination is made.

We apply a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining whether it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement.

The calculation of tax liabilities involves the inherent uncertainty associated with the application of complex tax laws. We are also subject to examination by various taxing authorities. We believe we have adequately provided in our financial statements for potential additional taxes. If we ultimately determine that these amounts are not owed, we would reverse the liability and recognize the tax benefit in the period in which we determine that the liability is no longer necessary. If an ultimate tax assessment exceeds our estimate of tax liabilities, we would record an additional charge to earnings.

#### **Results of Operations**

#### Revenue Background

We generate our revenue from the sale of software licenses, maintenance and professional services and to a small extent, hardware products. Under current accounting rules and policies, we recognize revenue from orders we receive for software licenses, services and hardware products at varying times. In most instances, we recognize revenue on a TSL software license order over the license term and on a term or perpetual software license order in the quarter in which the license is delivered. The average license term of the TSLs and term licenses we entered into in fiscal 2012, 2011, and 2010 was 2.7 years, 2.8 years and 2.9 years, respectively. Revenue on contracts requiring significant modification or development is accounted for using the percentage of completion method over the period of the development. Revenue on hardware product orders are generally recognized in full at the time the product is shipped. Contingent revenue is recognized if and when the applicable event occurs.

Revenue on maintenance orders is recognized ratably over the maintenance period (normally one year). Revenue on professional services orders is generally recognized after services are performed and accepted by the customer.

Our revenue in any fiscal quarter is equal to the sum of our time-based license, upfront, maintenance and professional services and hardware revenue for the period. We derive time-based license revenue in any quarter largely from TSL orders received and delivered in prior quarters and to a smaller extent due to contracts in which revenue is recognized as customer installments become due and payable and from contingent revenue arrangements. We derive upfront revenue directly from term and perpetual license and hardware product orders mostly booked and shipped during the quarter. We derive maintenance revenue in any quarter largely from maintenance orders received in prior quarters since our maintenance orders generally yield revenue ratably over a term of one year. We also derive professional services revenue primarily from orders received in prior quarters, since we recognize revenue from professional services as those services are delivered and accepted or on percentage of completion for arrangements requiring significant modification of our software, and not when they are booked. Our license revenue is sensitive to the mix of TSLs and perpetual or term licenses delivered during a reporting period. A TSL order typically yields lower current quarter revenue but contributes to revenue in future periods. For example, a \$120,000 order for a three-year TSL delivered on the last day of a quarter typically generates no revenue in that quarter, but \$10,000 in each of the twelve succeeding quarters. Conversely, a \$120,000 order for perpetual and term licenses with greater than 75% of the license fee due within one year from shipment typically generates \$120,000 in revenue in the quarter the product is delivered, but no future revenue. Additionally, revenue in a particular quarter may also be impacted by perpetual and term licenses in which less than 75% of the license fees and 100% of the maintenance fees are payable within one year from shipment as the related revenue will be recognized as revenue in the period when customer payments become due and payable.

Our customer arrangements are complex, involving hundreds of products and various license rights, and our customers bargain with us over many aspects of these arrangements. For example, they often demand a broader portfolio of solutions, support and services and seek more favorable terms such as expanded license usage, future purchase rights and other unique rights at an overall lower total cost. No single factor typically drives our customers' buying decisions, and we compete on

all fronts to serve customers in a highly competitive EDA market. Customers generally negotiate the total value of the arrangement rather than just unit pricing or volumes.

#### Total Revenue

Yea	r Ended October	· 31,	\$ Change	% Change	\$ Change % Change		
2012	2011	2010	2011 t	2011 to 2012		2011	
			(dollars in mil	lions)			
\$1,756.0	\$1,535.6	\$1,380.7	\$220.4	14%	\$154.9	11%	

Our revenues are subject to fluctuations, primarily due to customer requirements, including payment terms and the timing and value of contract renewals.

The sequential increase in total revenue from fiscal 2010 through fiscal 2012 was due to overall growth of our business including contributions of revenue from acquired companies. The increases were primarily in the time-based license revenue. Fiscal 2012 had approximately \$26 million of additional revenue due to the additional week in the fiscal year.

#### Time-Based License Revenue

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 to 2012		2010 to 2011	
		(dollars in millions)					
	\$1,449.3	\$1,260.3	\$1,158.4	\$189.0	15%	\$101.9	9%
Percentage of total							
revenue	83%	6 82%	84%	)			

The increase in time-based license revenue for fiscal 2012 compared to fiscal 2011 was primarily attributable to increases in TSL license revenue from arrangements booked in prior periods and from the contracts acquired through fiscal 2012 acquisitions and, to a lesser extent, due to higher contingent revenue, product sales, the impact of the additional week in fiscal 2012 and other time-based arrangements.

The increase in time-based license revenue for fiscal 2011 compared to fiscal 2010 was primarily attributable to increases in TSL license revenue from arrangements booked in prior periods, higher contingent revenue from royalties and product sales from prior-year acquisitions.

#### **Upfront Revenue**

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 to 2012		2010 to 2011	
				dollars in m	illions)		
	\$105.1	\$90.5	\$68.6	\$14.6	16%	\$21.9	32%
Percentage of total revenue	6%	6%	5%	)			

Changes in upfront revenue are generally attributable to normal fluctuations in customer requirements, which can drive the amount of upfront orders and revenue in any particular period.

The sequential increase in upfront revenue from fiscal 2010 through fiscal 2012 was primarily attributable to the increase in sales of our hardware products and perpetual licenses.

#### Maintenance and Service Revenue

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 1	2011 to 2012		to 2011
			(c	lollars in mil	lions)		
Maintenance revenue  Professional service and other	\$ 74.6	\$ 77.6	\$ 78.1	\$ (3.0)	(4)%	\$ (0.5)	(1)%
revenue	127.0	107.2	75.5	19.8	18%	31.7	42%
Total	\$201.6	\$184.8	\$153.6	\$16.8	9%	\$31.2	20%
Percentage of total revenue	119	6 12 <sup>9</sup>	6 11%	<b>'</b> 0			

Changes in maintenance revenue are generally attributable to the timing of renewals and the type of contracts renewed on maintenance contracts. Maintenance revenue was relatively flat during fiscal 2012, 2011 and 2010.

Professional services and other revenue increased in fiscal 2012 compared to fiscal 2011, primarily due to a higher level of consulting services.

Professional services and other revenue increased substantially in fiscal 2011 compared to fiscal 2010, primarily due to professional services contracts assumed from prior acquisitions.

#### Cost of Revenue and Operating Expenses

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 to 2012		2010	to 2011
			(dolla	ars in millior	ıs)		
Cost of revenue	\$ 392.7	\$ 340.5	\$ 281.1	\$ 52.2	15%	\$ 59.4	21%
Operating expenses	1,173.3	982.4	915.5	190.9	19%	66.9	7%
Total	\$1,566.0	\$1,322.9	\$1,196.6	\$243.1	18%	\$126.3	11%
Total expenses as a percentage of total revenue	89%	% 86%	% 87%	6			

Our expenses are generally impacted by changes in personnel-related costs including salaries, benefits, stock compensation and variable compensation, changes in amortization and changes in selling and marketing expenses. The increase in our expenses compared to prior fiscal years was primarily due to an increase in personnel-related costs driven by increased headcount from our acquisitions and related fixed charges including facilities, amortization of intangible assets, and depreciation as well as due to an additional week during the fiscal year. We allocate certain human resource programs, information technology and facility expenses among our functional income statement categories based on headcount within each functional area. Annually, or upon a significant change in headcount (such as a workforce reduction, realignment or acquisition) or other factors, management reviews the allocation methodology and expenses included in the allocation pool. Consequently, fluctuations in these drivers impact the amounts allocated to each functional area.

Foreign currency fluctuations, net of hedging, did not have a significant impact on expenses during fiscal 2012 as compared to fiscal 2011, or fiscal 2011 as compared to fiscal 2010. See Note 5 of *Notes to Consolidated Financial Statements* for details on our foreign exchange hedging programs.

#### Cost of Revenue

	Year Ended October 31,		\$ Change	% Change	\$ Change	% Change	
	2012	2011	2010	2011	to 2012	2010 to 2011	
			(dd	lars in mill	lions)		
Cost of license revenue	\$232.8	\$205.5	\$180.2	\$27.3	13%	\$25.3	14%
Cost of maintenance and service							
revenue	78.6	80.2	64.8	(1.6)	(2)%	15.4	24%
Amortization of intangible							
assets	81.3	54.8	36.1	26.5	48%	18.7	52%
Total	\$392.7	\$340.5	\$281.1	\$52.2	15%	\$59.4	21%
Percentage of total revenue	22%	22%	20%	)			

We divide cost of revenue into three categories: cost of license revenue, cost of maintenance and service revenue, and amortization of intangible assets. We segregate expenses directly associated with consulting and training services from cost of license revenue associated with internal functions providing license delivery and post-customer contract support services. We then allocate these group costs between cost of license revenue and cost of maintenance and service revenue based on license and maintenance and service revenue reported.

Cost of license revenue. Cost of license revenue includes costs related to products sold and software licensed, allocated operating costs related to product support and distribution costs, royalties paid to third party vendors, and the amortization of capitalized research and development costs associated with software products which have reached technological feasibility.

Cost of maintenance and service revenue. Cost of maintenance and service revenue includes operating costs related to maintaining the infrastructure necessary to operate our services and training organization, and costs associated with the delivery of our consulting services, such as, hotline and on-site support, production services and documentation of maintenance updates.

Amortization of intangible assets. Amortization of intangible assets, which is recorded to cost of revenue and operating expenses, includes the amortization of certain contract rights and the amortization of core/developed technology, trademarks, trade names, customer relationships, covenants not to compete and other intangibles related to acquisitions.

Cost of revenue increased by \$52.2 million or 15% in fiscal 2012 compared to fiscal 2011. The increase was primarily due to increases of \$26.5 million in amortization of intangible assets, \$19.0 million in personnel-related costs as a result of fiscal 2012 acquisitions and the impact of one extra week of costs of approximately \$2.2 million in fiscal 2012.

Cost of revenue as a percentage of total revenue increased in fiscal 2011 compared to fiscal 2010 primarily due to the increase in professional service revenue. The increase in cost of revenue in fiscal 2011 compared to fiscal 2010 was primarily due to an increase in \$16.9 million in personnel-related costs as a result of headcount increases from our prior-year acquisitions, an increase of \$18.9 million in costs to provide maintenance and professional services, an increase of \$2.3 million in hardware and license costs, and an increase of \$18.7 million for amortization of intangible assets due to our prior-year acquisitions.

### **Operating Expenses**

### Research and Development

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change	
	2012	12 2011 2010		2011 to 2012		2010 to 2011		
	(dollars in millions)							
	\$581.6	\$491.9	\$449.2	\$89.7	18%	\$42.7	10%	
Percentage of total revenue	33%	32%	33%					

The increase in research and development expense in fiscal 2012 compared to fiscal 2011 was primarily due to increases of \$61.0 million in personnel-related costs as a result of headcount increases primarily from our acquisitions, \$11.1 million in functionally allocated expenses as a result of headcount increases from our current year acquisitions, \$7.9 million in costs related to acquisitions, and one extra week of costs of approximately \$7.5 million in fiscal 2012 compared with fiscal 2011.

The increase in research and development expense in fiscal 2011 compared to fiscal 2010 was primarily due to an increase of \$31.8 million in personnel-related costs and an increase of \$11.9 million in functionally allocated expenses as a result of headcount increases from our prior-year acquisitions.

### Sales and Marketing

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011 2010		2011 to 2012		2010 to 2011	
		(dollars in m					
	\$415.6	\$363.1	\$339.8	\$52.5	14%	\$23.3	7%
Percentage of total revenue	24%	6 24 <sup>9</sup>	6 25%				

Changes in commissions and other variable compensation are generally attributable to the volume of contracts and timing of shipments based on contract requirements.

The increase in sales and marketing expense for fiscal 2012 compared with fiscal 2011 was due to increases in personnel-related costs of \$25.6 million primarily driven by headcount increases from our acquisitions, \$11.2 million in variable compensation due to higher shipments, \$8.9 million in costs related to acquisitions, and one extra week of costs of approximately \$4.9 million in fiscal 2012 compared with fiscal 2011.

The increase in sales and marketing expense for fiscal 2011 compared with fiscal 2010 was primarily attributable to an increase of \$10.6 million in commissions and other variable compensation, an increase of \$9.6 million in other personnel-related costs due to an increase in headcount from prior-year acquisitions, and an increase of \$2.7 million in travel-related costs.

### General and Administrative

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010 2011 to 2012		o 2012	2010 to 2011	
	\$157.5	\$112.8	\$114.9	\$44.7	40%	\$(2.1)	(2)%
Percentage of total revenue	9%	5 7%	8%				

The increase in general and administrative expense for fiscal 2012 compared with fiscal 2011 was primarily due to increases of \$15.9 million in personnel-related costs as a result of headcount increases primarily from our acquisitions, \$24.5 million in costs related to acquisitions, \$6.8 million in facility expenses, \$5.8 million in depreciation and maintenance expenses and one extra week of costs of approximately \$1.6 million in fiscal 2012 compared with fiscal 2011. The increases were partially offset by a higher allocation of \$18.0 million in expenses to other functions in fiscal 2012 compared to fiscal 2011, as a result of increased expenses in the allocation pool.

The decrease in general and administrative expense for fiscal 2011 compared with fiscal 2010 was primarily due to a decrease of \$13.8 million resulting from higher allocation of expenses to other functional areas because of increased headcount. This decrease was partially offset by an increase of \$3.3 million in personnel-related costs, \$6.1 million in facility expenses and \$2.9 million in other general and administrative expenses primarily as a result of our prior-year acquisitions.

### Change in Fair Value of Deferred Compensation

The income or loss arising from the change in fair value of our non-qualified deferred compensation plan obligation is recorded in cost of sales and each functional operating expense, with the offsetting change in the fair value of the related assets recorded in other income (expense), net. These assets are classified as trading securities. There is no overall impact to our net income from the income or loss of our deferred compensation plan obligation and asset.

### Acquired In-Process Research and Development

In-process research and development (IPR&D) costs relate to in-process technologies acquired in acquisitions. The value assigned to IPR&D is determined by considering the importance of each project to our overall development plan, estimating costs to develop the IPR&D into commercially viable products, estimating the resulting net cash flows from such projects when completed and discounting the net cash flows back to their present value. The utilized discount rate is our weighted average cost of capital, taking into account the inherent uncertainties in future revenue estimates and the profitability of such technology, the successful development of the IPR&D, its useful life and the uncertainty of technological advances, all of which are unknown at the time of determination.

Upon completion of development, the underlying intangible asset is amortized over its estimated useful life and recorded in cost of revenue. IPR&D projects acquired are anticipated to be completed over a period of one to three years from the date of the acquisition. IPR&D projects of \$3.3 million were completed during fiscal 2012. See Note 3 and Note 4 of *Notes to Consolidated Financial Statements*.

### Amortization of Intangible Assets

Amortization of intangible assets includes the amortization of contract rights and the amortization of core/developed technology, trademarks, trade names, customer relationships, covenants not to compete, and other intangibles related to acquisitions completed in current and prior years.

Amortization expense is included in the consolidated statements of operations as follows:

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 to 2012		2010 to 2011	
				(dollars in r	nillions)		
Included in cost of revenue	\$81.3	\$54.8	\$36.1	\$26.5	48%	\$18.7	52%
Included in operating expenses	18.6	14.6	11.6	4.0	27%	3.0	26%
Total	\$99.9	\$69.4	\$47.7	\$30.5	44%	\$21.7	45%
Percentage of total revenue	6%	6 5%	6 39	%			

Amortization of capitalized software development costs is not presented in the above table and is included in cost of license revenue in the consolidated statements of operations.

The increases in amortization of intangible assets from fiscal 2010 through 2012 was primarily due to the amortization of intangible assets from acquisitions offset by certain intangible assets becoming fully amortized. See Note 4 of *Notes to Consolidated Financial Statements* for a schedule of future amortization amounts, which is incorporated by reference here.

*Impairment of Intangible Assets.* We did not record any impairment charges to our intangible assets during fiscal 2012, 2011, or 2010.

### Other Income (Expense), Net

	Year Ended October 31,			\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011	o 2012	2010	to 2011
				(dollars in	millions)		
Interest income	\$ 1.6	\$ 2.1	\$ 5.4	\$(0.5)	(24)%	\$(3.3)	(61)%
Interest expense	\$ (2.0)	\$(0.1)	\$ (0.3)	\$(1.9)	1,900%	\$ 0.2	(67)%
Gain (loss) on assets related to							
executive deferred compensation							
plan	7.5	2.4	8.8	5.1	213%	(6.4)	(73)%
Foreign currency exchange gain							, ,
(loss)	1.7	1.7	(1.5)	0.0	0%	3.2	(213)%
Other, net	2.3	0.2	2.1	2.1	1,050%	(1.9)	(90)%
Total	\$11.1	\$ 6.3	\$14.5	\$ 4.8	76%	\$(8.2)	(57)%

The net increase in other income (expense) in fiscal 2012 as compared to fiscal 2011 was primarily due to an increase in gain on assets related to our deferred compensation plan, and an increase in premiums on hedge contracts included in other income (expense), net, partially offset by higher interest expense due to a term loan that we entered into in 2012.

The net decrease in other income (expense), net in fiscal 2011 as compared to fiscal 2010 was primarily due to a decrease in gain on assets related to our deferred compensation plan, a decrease in gains on sale of investments included other income (expense), net and lower interest rates. This decrease was partially offset by foreign exchange fluctuations.

### **Income Taxes**

Our effective tax rates for fiscal 2012 and 2011 include tax benefits of settlements with the IRS of \$15.9 million (for fiscal years 2010 through 2011), with Taiwan of \$14.7M (net tax benefit resulting from the 2008 settlement being applied to other open fiscal years), with Hungary of \$6.3 million (for fiscal years 2006 through 2010) in fiscal year 2012 and a settlement with the IRS of \$32.8 million (for fiscal years 2006 through 2009) in fiscal 2011. Without the impact of the settlements, the effective tax rate for fiscal 2012 and 2011 would have been 27.7% and 13.9%, respectively. For further discussion of the provision for income taxes and settlements, see Note 10 of the *Notes to Condensed Consolidated Financial Statements*.

### **Liquidity and Capital Resources**

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

As of October 31, 2012, we held an aggregate of \$198.0 million in cash and cash equivalents in the United States and an aggregate of \$502.4 million in our foreign subsidiaries. Funds held in our foreign subsidiaries are generated from revenue outside North America. At present, such foreign funds are considered to be indefinitely reinvested in foreign countries to the extent of indefinitely reinvested foreign earnings. During the current year we primarily used our cash in foreign subsidiaries to fund our overseas acquisitions of SpringSoft and EVE. In the event funds from foreign operations are needed to fund cash needs in the United States and if U.S. taxes have not already been previously accrued, we would be required to accrue and pay additional U.S. taxes in order to repatriate these funds.

The following sections discuss changes in our balance sheet and cash flows, and other commitments on our liquidity and capital resources during fiscal 2012.

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

	Year Ende	d October 31,		
	2012 2011		\$ Change	% Change
	(0	dollars in millio	ns)	
Cash and cash equivalents	\$700.4	\$ 855.1	\$(154.7)	(18)%
Short-term investments		149.0	(149.0)	(100)%
Total	\$700.4	\$1,004.1	<u>\$(303.7)</u>	(30)%

Our cash generated from operating activities was \$486.1 million in fiscal 2012. During fiscal 2012, we liquidated our short-term investments primarily to fund our acquisitions.

Other cash activities were (1) payments for acquisitions, net of cash acquired, of \$970.1 million, (2) net proceeds from sales and purchases of short-term investments of \$148.0 million (3) proceeds from a credit facility and term loan of \$250.0 million and subsequent repayment of \$115.0 million of those loans (4) share repurchases of \$40.0 million offset by proceeds from employee stock plans of \$175.9 million, and (5) purchases of property and equipment of \$54.2 million.

### Cash flows

	Year E	nded Octob	er 31,	\$ Change	% Change	\$ Change	% Change
	2012	2011	2010	2011 t	o 2012	2010 t	o 2011
Cash provided by operating							
activities	\$ 486.1	\$ 440.3	\$ 341.0	\$ 45.8	10%	\$ 99.3	29%
Cash (used in) investing							
activities	(879.1)	(88.8)	(238.7)	(790.3)	890%	149.9	(63)%
Cash provided by (used in)	, ,	, ,	, ,	, ,			, ,
financing activities	243.5	(277.6)	(43.1)	521.1	(188)%	(234.5)	544%

### Cash provided by operating activities

We expect cash from our operating activities to fluctuate in future periods as a result of a number of factors, including the timing of our billings and collections, our operating results, the timing and amount of tax and other liability payments. Cash provided by our operations is dependent primarily upon the payment terms of our license agreements. We generally receive cash from upfront revenue much sooner than from time-based license revenue, in which the license fee is typically paid either quarterly or annually over the term of the license.

*Fiscal 2011 to fiscal 2012.* Cash provided by operating activities increased slightly due to an increase in collections from customers, offset partly by higher disbursements to vendors.

Fiscal 2010 to fiscal 2011. Cash provided by operating activities increased due to fluctuations in operating assets and liabilities primarily resulting from increased accounts receivable collections due to timing of billings, offset partly by higher payments due to disbursements to vendors, higher variable compensation costs and higher personnel-related costs due to increased headcount, as well as increased tax payments.

### Cash used in investing activities

Fiscal 2011 to fiscal 2012. The increase in cash used in investing activities was primarily due to cash used for acquisitions in fiscal 2012, partly offset by net proceeds from the purchase and sale of investments.

Fiscal 2010 to fiscal 2011. The decrease in cash used in financing activities primarily relates to lower cash payments for acquisitions in 2011 offset by lower net proceeds from sales and maturities of short-term investments and higher property and equipment purchases. See Note 3 of Notes to Consolidated Financial Statements.

### Cash provided by (used in) financing activities

Fiscal 2011 to fiscal 2012. The increase in cash provided by financing activities primarily relates to net proceeds from credit facilities obtained primarily to finance our acquisitions and less common stock repurchases under our stock repurchase program.

Fiscal 2010 to fiscal 2011. The increase in cash used relates to common stock repurchases under our stock repurchase program and accelerated stock repurchase (ASR) program, including cash paid for an equity forward contract as part of the ASR program, partially offset by higher proceeds from issuances of common stock.

### Accounts Receivable, net

Year	End	ha	Octo	hor	31
rear		eu	OCIO	ber	JΙ

2012	2011	\$ Change	% Change
(dollars in	millions)		
\$292.7	\$203.1	\$89.6	44%

Our accounts receivable and days sales outstanding (DSO) are primarily driven by our billing and collections activities. Our DSO was 59 days at October 31, 2012 and 47 days at October 31, 2011. The increase in DSO is attributable to the receivables acquired through our acquisitions and the timing of billings at the end of fiscal 2012.

Working Capital. Working capital is comprised of current assets less current liabilities, as shown on our consolidated balance sheets:

	Year Ended	October 31,		
	2012	2011	\$ Change	% Change
	(dollars in	millions)		
Current assets	\$1,140.7	\$1,338.1	\$(197.4)	(15)%
Current liabilities	1,252.6	1,010.3	242.3	24%
Working capital	<u>\$ (111.9</u> )	\$ 327.8	<u>\$(439.7)</u>	<u>(134</u> )%

Changes in our working capital were primarily due to (1) a \$303.7 million decrease in cash, cash equivalents and short-term investments used to fund our fiscal 2012 acquisitions, (2) an \$89.5 million increase in accounts receivable, (3) a \$131.3 million increase in deferred revenue due to timing of our billings, (4) an increase in accounts payable and accrued liabilities of \$80.9 million, (5) an increase of \$30.0 million in short-term debt obligations from our new term loan, and (6) a net \$16.7 million increase due to movements in other current assets, and tax-related assets.

### Other

As of October 31, 2012, our cash equivalents consisted of cash deposits, tax-exempt money market mutual funds and taxable money market mutual funds. We follow an established investment policy and set of guidelines to monitor, manage and limit our exposure to interest rate and credit risk.

We proactively manage our cash and cash equivalents and investments balances and closely monitor our capital and stock repurchase expenditures to ensure ample liquidity. Additionally, we believe the overall credit quality of our portfolio is strong, with our global excess cash, and our cash equivalents and fixed income portfolio invested in banks and securities with a weighted-average credit rating exceeding

AA. The majority of our investments are classified as Level 1 or Level 2 investments, as measured under fair value guidance. See Notes 5 and 6 of the *Notes to Consolidated Financial Statements*.

### **Other Commitments**

On February 17, 2012, we entered into an amended and restated credit agreement with several lenders (the "Credit Agreement") providing for (i) a \$350.0 million senior unsecured revolving credit facility (the "Revolver") and (ii) a \$150.0 million senior unsecured term loan facility (the "Term Loan"). The Credit Agreement amended and restated our previous credit agreement dated October 14, 2011 in order to add a new term loan facility, primarily to finance a portion of the purchase price for the acquisition of Magma on February 22, 2012. Subject to obtaining additional commitments from lenders, the principal amount of the loans provided under the Credit Agreement may be increased by us by up to an additional \$150.0 million through October 13, 2015. The Credit Agreement terminates on October 14, 2016. The Credit Agreement contains financial covenants requiring us to operate within a maximum leverage ratio and maintain specified levels of cash, as well as other non-financial covenants. Borrowings bear interest at a floating rate based on a margin over our choice of market observable base rates as defined in the Credit Agreement. At October 31, 2012, borrowings under the Revolver bore interest at LIBOR + 0.975% and borrowings under the Term Loan bore interest at LIBOR + 1.125%. In addition, commitment fees are payable on the Revolver at rates between 0.150% and 0.300% per year based on our leverage ratio on the daily amount of the revolving commitment. During fiscal 2012, we borrowed \$250.0 million under the Credit Agreement. As of October 31, 2012, we had no outstanding balance under the Revolver and a \$135.0 million outstanding balance under the Term Loan, and are in compliance with all covenants. \$105.0 million of the borrowings under the Term Loan are classified as long term. Principal payments on a portion of the Term Loan are due in equal quarterly installments of \$7.5 million beginning in the third quarter of our fiscal 2012, with the remainder due in October 2016. We can elect to make prepayments on the Term Loan, in whole or in part, without premium or penalty. During fiscal 2012, we made principal payments of \$100.0 million and \$15.0 million under the Revolver and Term Loan, respectively. We had no outstanding debt balances as of October 31, 2011. We expect the borrowings under the Revolver will fluctuate from quarter to quarter.

### **Contractual Obligations**

The following table summarizes our contractual obligations as of October 31, 2012.

	Total	Fiscal 2013	Fiscal 2014/ Fiscal 2015	Fiscal 2016/ Fiscal 2017	Thereafter	Other
			(in thousands)			
Lease Obligations:						
Capital Lease	\$ 6,332	\$ 4,180	\$ 2,152	\$ —	\$ —	\$ —
Operating Leases						
Minimum lease payments,						
net(1)	435,060	43,686	75,406	61,714	254,254	
Other	101,371	10,956	15,292	14,618	60,505	
Purchase Obligations(2)	101,741	86,428	15,119	192	2	_
Term Loan(3)	135,000	30,000	60,000	45,000		_
Other Long-Term Obligations(4)	4,366	1,272	2,543	551		
Long term accrued income						
taxes(5)	52,645					\$52,645
Total	\$836,515	\$176,522	\$170,512	\$122,075	\$314,761	\$52,645

<sup>(1)</sup> See Note 7 of Notes to Consolidated Financial Statements.

<sup>(2)</sup> Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the ordinary course of business for which we have not received the goods or services as of October 31, 2012. 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.
- (3) This commitment relates to the principal on the Term Loan as discussed in *Other Commitments* above.
- (4) These other obligations include the Term Loan fees, a credit facility assumed through an acquisition and performance-based contingent consideration obligations.
- (5) Long-term accrued income taxes represent uncertain tax benefits as of October 31, 2012. Currently, a reasonably reliable estimate of timing of payments in individual years beyond fiscal 2012 cannot be made due to uncertainties in timing of the commencement and settlement of potential tax audits.

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

### **Off-Balance Sheet Arrangements**

As of October 31, 2012, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

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

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

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

During the second quarter of fiscal 2012, we liquidated our municipal bond investment portfolio and incurred debt primarily to fund the Magma acquisition.

Our exposure to market risk for changes in interest rates relates to our cash and cash equivalents and outstanding debt. As of October 31, 2012, all of our cash, cash equivalents and debt were at short-term variable interest rates. While par value generally approximates fair value on variable instruments, rising interest rates over time would increase both our interest income and our interest expense.

The following tables present our cash equivalents, investments and debt by fiscal year of expected maturity and average interest rates.

### **As of October 31, 2012**

	Maturing in Year Ending October 31,								
	2013 2014			2015 2016		2016	Total	Fair Value	
					(in thou	sand	ds)		
Cash equivalent (variable rate)	\$ 533,221	\$	_	\$	_	\$	_	\$533,221	\$533,221
Average interest rate	0.39%	0	— %	0	— %	6	— %	o	
Short-term debt (variable rate)									
Revolver	\$ —	\$	_	\$	_	\$	_	\$ —	\$ —
Term Loan	\$ 30,000	\$	_	\$	_	\$	_	\$ — \$ 30,000	\$ 30,000
Average interest rate	LIBOR +								
	1.125%	, 0	— %	0	— %	6	— %	, 0	
Long-term debt (variable rate)									
Term Loan		\$ 3	0,000	\$	30,000	\$	45,000	\$105,000	\$105,000
Average interest rate		LIB	OR +	L	IBOR +	L	.IBOR +		
			1.125%	0	1.125%	6	1.125%	0	

### As of October 31, 2011

	Maturing in Year Ending October 31,				
	2012	2013	2014	Total	Fair Value
			(in thousands)		
Cash equivalents (variable rate)	\$705,079	\$ —	\$ —	\$705,079	\$705,079
Average interest rate	0.18%	— %	.́ — %		
Short-term investments (variable rate)	\$ 6,885	\$ —	\$ —	\$ 6,885	\$ 6,885
Average interest rate	0.14%	— %	′o — %		
Short-term investments (fixed rate)	\$111,217	\$23,789	\$7,106	\$142,112	\$142,112
Average interest rate	0.74%	0.81%	6 0.72%		

Foreign Currency Risk. We operate internationally and are exposed to potentially adverse movements in currency exchange rates. The functional currency of the majority of our active foreign subsidiaries is the foreign subsidiary's local currency. We enter into hedges in the form of foreign currency forward contracts to reduce our exposure to foreign currency rate changes on non-functional currency denominated forecasted transactions and balance sheet positions including: (1) certain assets and liabilities, (2) shipments forecasted to occur within approximately one month, (3) future billings and revenue on previously shipped orders, and (4) certain future intercompany invoices denominated in foreign currencies. The foreign currency contracts are carried at fair value and denominated in various currencies as listed in the tables below. The duration of forward contracts usually ranges from one month to 21 months. A description of our accounting for foreign currency contracts is included in Note 2 and Note 5 of Notes to Consolidated Financial Statements.

The success of our hedging activities depends upon the accuracy of our estimates of various balances and transactions denominated in non-functional currencies. To the extent our estimates are correct, gains and losses on our foreign currency contracts will be offset by corresponding losses and gains on the underlying transactions. For example, if the Euro were to depreciate by 10% compared to the U.S. dollar prior to the settlement of the Euro forward contracts listed in the table below providing information as of October 31, 2012, the fair value of the contracts would decrease by approximately \$9.3 million, and we would be required to pay approximately \$9.3 million to the counterparty upon contract maturity. At the same time, the U.S. dollar value of our Euro-based expenses would decline, resulting in a gain and positive cash flow of approximately \$9.3 million that would offset the loss and negative cash flow on the maturing forward contracts.

Net unrealized loss of approximately \$1.3 million and loss of approximately \$12.8 million, net of tax are included in accumulated other comprehensive income (loss) in our consolidated balance sheets as of October 31, 2012 and October 31, 2011, respectively.

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

We do not use foreign currency forward contracts for speculative or trading purposes. We enter into foreign exchange forward contracts with financial institutions and have not experienced nonperformance by counterparties. Further, we anticipate performance by all counterparties to such agreements. The following table provides information about the gross notional values of our foreign currency contracts as of October 31, 2012:

	Gross Notional Amount in U.S. Dollars	Average Contract Rate
	(in thousands)	
Forward Contract Values:		
Japanese yen	\$259,317	79.09
Euro	93,316	0.761
Indian rupee	54,016	54.438
Chinese renminbi	52,669	6.353
Taiwan dollar	35,633	29.174
Canadian dollar	30,180	1.012
British pound sterling	24,862	0.630
Israeli shekel	14,982	4.010
Armenian dram	13,684	396.882
Korean won	13,045	1137.426
Swiss franc	8,222	0.971
Swedish krona	8,114	6.692
Singapore dollar	5,282	1.243
Russian ruble	2,818	33.261
Australian dollar	2,077	0.973
Hungarian forint	470	222.280
Polish zloty	291	3.243
	\$618,978	

The following table provides information about the gross notional values of our foreign currency contracts as of October 31, 2011:

	Gross Notional Amount in U.S. Dollars	Average Contract Rate
	(in thousands)	
Forward Contract Values:		
Japanese yen	\$204,536	78.52
Euro	120,268	0.722
Indian rupee	52,092	47.628
Chinese renminbi	49,743	6.391
Canadian dollar	42,956	0.998
Taiwan dollar	34,895	28.75
British pound sterling	22,994	0.629
Israeli shekel	16,133	3.504
Armenian dram	12,754	355.04
Swiss franc	10,249	0.815
Korean Won	9,672	1,079.92
Swedish krona	7,409	6.52
Hungarian forint	5,536	212.32
Singapore dollar	5,002	1.22
Australian dollar	2,729	0.956
Russian ruble	2,210	28.365
Polish zloty	666	3.173
	\$599,844	

Equity Risk. Our strategic investment portfolio consists of approximately \$11.7 million and \$4.0 million of non-marketable equity securities in privately held companies as of October 31, 2012 and October 31, 2011, respectively. These investments are accounted for under the cost or equity methods. The cost basis of securities sold is based on the specific identification method. The securities of privately held companies are reported at carrying value. Investments are written down to the fair value if there are any events or changes in circumstances that indicate any other than temporary decline in the value. During fiscal 2012 and 2011, we wrote down the value of our strategic investment portfolio by \$0.5 million and \$1.0 million, respectively. None of our investments in our strategic investment portfolio are held for trading purposes.

### **Selected Unaudited Quarterly Financial Data**

The table below includes certain unaudited financial information for the last four fiscal quarters. Refer to Note 2 of *Notes to Consolidated Financial Statements* for information on the Company's fiscal year end.

	Quarter Ended							
	Janua	ry 31,(1)	Ap	oril 30,	Jι	ıly 31,	Oct	ober 31,
		(in th	ousar	nds, exce	pt pe	r share da	ıta)	·
2012:								
Revenue	\$42	5,496	\$43	32,561	\$44	13,747	\$45	54,213
Gross margin	33	5,642	33	32,055	34	43,958	35	51,689
Income before provision for income taxes	7	3,829	2	23,489	6	31,085	4	12,732
Net income	5	6,694	2	20,971	7	75,656	2	29,081
Net income per share								
Basic	\$	0.39	\$	0.14	\$	0.51	\$	0.19
Diluted		0.39		0.14		0.50		0.19
2011:								
Revenue	\$36	4,644	\$39	93,670	\$38	36,795	\$39	90,534
Gross margin	28	0,339	30	7,642	30	02,063	30	05,149
Income before provision for income taxes	5	2,332	Ę	57,259	Į	55,967	ļ	53,555
Net income	4	8,226	8	31,114	Į	52,082	3	39,942
Net income per share								
Basic	\$	0.32	\$	0.55	\$	0.36	\$	0.28
Diluted		0.31		0.53		0.35		0.27

<sup>(1)</sup> Our fiscal year generally ends on the Saturday nearest to October 31 and consists of 52 weeks, with the exception that approximately every five years, we have a 53-week year. When a 53-week year occurs, we include the additional week in the first quarter to realign fiscal quarters with calendar quarters. The first quarter of fiscal 2012 was a 14-week quarter. All other quarters in fiscal 2012 and all quarters in fiscal 2011 were 13-week quarters.

### Item 8. Financial Statements and Supplementary Data

### Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders Synopsys, Inc.:

We have audited the accompanying consolidated balance sheets of Synopsys, Inc. and subsidiaries (the Company) as of November 3, 2012 and October 29, 2011, and the related consolidated statements of operations, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended November 3, 2012. We also have audited Synopsys Inc.'s internal control over financial reporting as of November 3, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting appearing under item 9A(b). Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, Synopsys, Inc. has excluded from their evaluation the internal control over financial reporting of SpringSoft, Inc., of which the Company purchased a controlling interest as of October 1, 2012, and Emulation & Verification Engineering S.A. (EVE), which Synopsys, Inc. acquired on October 4, 2012, as discussed in Note 3 of the notes to the consolidated financial statements. As of and for the year ended November 3, 2012, SpringSoft, Inc. and EVE represented, in the aggregate, less than 4% and 1% of consolidated total assets and total revenue, respectively.

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 November 3, 2012 and October 29, 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended November 3, 2012, in conformity with U.S. generally accepted accounting principles. Also in our opinion, Synopsys, Inc. maintained, in all material respects, effective internal control over financial reporting as of November 3, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ KPMG LLP

Santa Clara, California December 20, 2012

# **CONSOLIDATED BALANCE SHEETS** (In thousands, except par value amounts)

	October 31,	
	2012	2011
ASSETS		
Current assets: Cash and cash equivalents	\$ 700,382 —	\$ 855,077 148,997
Total cash, cash equivalents and short-term investments	700,382	1,004,074
respectively  Deferred income taxes  Income taxes receivable and prepaid taxes  Prepaid and other current assets	292,668 74,712 17,267 55,627	203,124 58,536 25,545 46,776
Total current assets  Property and equipment, net  Goodwill  Intangible assets, net  Long-term prepaid taxes  Long-term deferred income taxes  Other long-term assets	1,140,656 191,243 1,976,987 466,322 9,429 239,412 123,607	1,338,055 159,517 1,289,286 196,031 1,510 281,056 103,389
Total assets	\$4,147,656	\$3,368,844
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Accounts payable and accrued liabilities Accrued income taxes Deferred revenue Short-term debt	\$ 383,093 4,682 834,864 30,000	\$ 302,176 4,589 703,555 —
Total current liabilities  Long-term accrued income taxes  Long-term deferred revenue  Long-term debt  Other long-term liabilities	1,252,639 52,645 67,184 105,000 126,217	1,010,320 92,940 56,208 — 108,076
Total liabilities	1,603,685	1,267,544
outstanding	— 1,509	1,433
Capital in excess of par value	1,585,034 1,098,694 (168,090) (15,461)	1,521,327 957,517 (358,032)
Total Synopsys stockholders' equity	2,501,686 42,285	2,101,300
Total stockholders' equity  Total liabilities and stockholders' equity	2,543,971 \$4,147,656	2,101,300 \$3,368,844

See accompanying notes to consolidated financial statements.

## CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Year Ended October 31,			
	2012	2011	2010	
Revenue:				
Time-based license	\$1,449,300	\$1,260,342	\$1,158,418	
Upfront	105,137	90,531	68,618	
Maintenance and service	201,580	184,770	153,625	
Total revenue	1,756,017	1,535,643	1,380,661	
Cost of revenue:				
License	232,811	205,390	180,245	
Maintenance and service	78,607	80,241	64,746	
Amortization of intangible assets	81,255	54,819	36,103	
Total cost of revenue	392,673	340,450	281,094	
Gross margin	1,363,344	1,195,193	1,099,567	
Operating expenses:				
Research and development	581,628	491,871	449,229	
Sales and marketing	415,629	363,118	339,759	
General and administrative	157,459	112,760	114,887	
Amortization of intangible assets	18,604	14,601	11,582	
Total operating expenses	1,173,320	982,350	915,457	
Operating income	190,024	212,843	184,110	
Other income (expense), net	11,111	6,270	14,548	
Income before provision for income taxes	201,135	219,113	198,658	
Provision (benefit) for income taxes	18,733	(2,251)	(38,405)	
Net income	\$ 182,402	\$ 221,364	\$ 237,063	
Net income per share:				
Basic	\$ 1.24	\$ 1.51	\$ 1.60	
Diluted	\$ 1.21	\$ 1.47	\$ 1.56	
Shares used in computing per share amounts:				
Basic	146,887	146,573	148,013	
Diluted	150,280	150,367	151,911	

SYNOPSYS, INC.

# CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME (In thousands)

181,898 (215) (2,731) 221,364 (342) (8,477) 216,193 (401,836) (33,335) 163,682 56,414 237,063 (2,307) (12,527) (3,443) 6,334 (11,943)225,120 (184,699) 145,788 59,979 4,598 5,230 (5,171)14,235 (5,805) 187,382 (40,000) 181,163 71,337 42,789 5,484 \$2,100,182 \$2,101,300 \$1,844,166 \$2,543,971 Non-controlling Interest (504)\$42,285 Total Synopsys Shareholder's | Equity 237,063 (2,307) (12,527) (3,443) 6,334 225,120 (184,699) 145,788 59,979 216,193 (401,836) (33,335) 163,682 56,414 (215) (2,731) (11,943) (342) (8,477) 14,235 (5,805) 187,886 (40,000) 181,163 71,337 \$2,501,686 \$2,100,182 221,364 1,989 (5,171)5,484 \$1,844,166 \$2,101,300 182,402 Comprehensive Income (Loss) Accumulated Other (3,443) 6,334 (342) (8,477) (2,731) 14,235 (5,805) \$(15,461) \$ (3,831) (2,307) (12,527) \$(15,774) 1,989 \$(20,945) (184,699) 215,731 Treasury Stock (73,335) 263,277 \$ 574,980 \$(228,618) \$(197,586) \$(358,032) \$(168,090) 241,390 (41,369)(34,521)957,517 770,674 (41,225)Retained Earnings \$1,098,694 182,402 237,063 221,364 ↔ S 33,360 (40,990) 71,337 82 (28,672) 59,979 4,598 5,230 151 (33,335) (43,286) 56,414 Capital in Excess of Par \$1,469 \$1,500,166 \$1,541,383 \$1,521,327 \$1,585,034 Value Shares Amount (151)\$1,485 \$1,509 Common Stock 88 38 66 \$1,433 (25) 146,945 (8,236) 9,770 (15,144)9,973 (2,474) 10,065 150,899 148,479 143,308 Purchases of treasury stock
Equity forward contract
Common stock issued
Stock compensation expense Balance at October 31, 2010
Components of comprehensive income (loss):
Net income Purchases of treasury stock
Common stock issued
Stock compensation expense Purchases of treasury stock ...... Fotal comprehensive income (loss) Unrealized loss on investments, net of tax of \$1,522

Deferred loss on cash flow hedges, net of tax of \$1,520

Reclassification adjustment on deferred gain of cash flow hedges, net of Unrealized loss on investments, net of tax of \$58
Deferred loss on cash flow hedges, net of tax of \$1,101
Reclassification adjustment on deferred loss of cash flow hedges, net of Total comprehensive income (loss) Total comprehensive income (loss) ...... Common stock issued Stock compensation expense Stock awards assumed in acquisition Tax adjustments(1) Other comprehensive income (loss) ...... Other comprehensive income (loss) ....... Reclassification adjustment on deferred loss of cash flow hedges, net of Other comprehensive income (loss) ...... Unrealized loss on investments, net of tax of \$226 Deferred loss on cash flow hedges, net of tax of \$3,049 Non-controlling interest in an acquired company Balance at October 31, 2009
Components of comprehensive income (loss):
Net income Balance at October 31, 2011

Components of comprehensive income (loss):
Net income Foreign currency translation adjustment Foreign currency translation adjustment Foreign currency translation adjustment Balance at October 31, 2012 tax of \$(4,174) tax of \$2,923 tax of \$(422)

See accompanying notes to consolidated financial statements.

<sup>)</sup> See Note 10 to the consolidated financial statements.

# CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Year	Ended Octobe	r 31,
	2012	2011	2010
Cash flow from operating activities:			
Net income	\$ 182,402	\$ 221,364	\$ 237,063
Amortization and depreciation	156,840	128,550	101,201
Stock compensation	71,414	56,414	59,988
Allowance for doubtful accounts	3,754	1,058	(899)
Write-down of long-term investments	452 (650)	999 (936)	468 (3,995)
Deferred income taxes	12,850	22,278	38,356
Net changes in operating assets and liabilities, net of acquired assets and liabilities:	,	,	,
Accounts receivable	(53,395)	(18,974)	(16,202)
Prepaid and other current assets	15,199	(13,445)	4,638
Other long-term assets	(10,231) 42,960	(4,248) (7,408)	(5,923) 10,566
Income taxes	(43,113)	(58,377)	(94,052)
Deferred revenue	107,586	113,041	9,827
Net cash provided by operating activities	486,068	440,316	341,036
Cash flows from investing activities:			
Proceeds from sales and maturities of short-term	100 100	400.000	547.000
investments	166,132 (18,179)	136,983 (127,385)	547,686 (243,515)
Proceeds from sales of long-term investments	506	2,828	(243,313)
Purchases of property and equipment	(54,191)	(57,345)	(39,223)
acquired	(970,089)	(41,015)	(500,829)
Capitalization of software development costs	(3,302)	(2,885)	(2,852)
Net cash used in investing activities	(879,123)	(88,819)	(238,733)
Cash flows from financing activities:			
Principal payments on capital leases	(6,252)	(4,628)	(3,692)
Proceeds from credit facilities	250,000 (136,156)	_	_
Issuances of common stock	175,896	162,180	145,329
Purchase of equity forward contract		(33,335)	
Purchases of treasury stock	(40,000)	(401,836)	(184,699)
Net cash provided by (used in) financing activities Effect of exchange rate changes on cash and cash	243,488	(277,619)	(43,062)
equivalents	(5,128)	5,792	14,553
Net change in cash and cash equivalents	(154,695)	79,670	73,794
Cash and cash equivalents, beginning of year	855,077	775,407	701,613
Cash and cash equivalents, end of year	\$ 700,382	\$ 855,077	\$ 775,407
Supplemental Disclosure of Cash Flow Information:			
Cash paid for income taxes during the year:	\$ 49,208 \$ 1,961	\$ 36,577 \$ 69	\$ 18,673 \$ 171

See accompanying notes to consolidated financial statements.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### Note 1. Description of Business

Synopsys, Inc. (Synopsys or the Company) is a world leader in supplying the electronic design automation (EDA) software that engineers use to design, create prototypes for and test integrated circuits, also known as chips. The Company also provides software and hardware used to develop the systems that incorporate integrated circuits and the software that runs on those integrated circuits. The Company's intellectual property (IP) products are pre-designed circuits that engineers use as components of larger chip designs rather than designing those circuits themselves. To complement these product offerings, the Company provides technical services to support our solutions and we help our customers develop chips and electronic systems.

### Note 2. Summary of Significant Accounting Policies

Fiscal Year End. The Company's fiscal year generally ends on the Saturday nearest to October 31 and consists of 52 weeks, with the exception that approximately every five years, the Company has a 53-week year. When a 53-week year occurs, the Company includes the additional week in the first quarter to realign fiscal quarters with calendar quarters. Fiscal 2012 was a 53-week year and ended on November 3, 2012. Fiscal 2011 and fiscal 2010 were 52-week years and ended on October 29, 2011 and October 30, 2010, respectively. For presentation purposes, the consolidated financial statements and accompanying notes refer to the closest 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.

Use of Estimates. To prepare financial statements in conformity with U.S. generally accepted accounting principles (GAAP), management must make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from these estimates and may result in material effects on the Company's operating results and financial position.

*Basis of Presentation.* Certain immaterial amounts on the prior period consolidated balance sheet have been reclassified to conform to the current period presentation.

Foreign Currency Translation. The functional currency of the majority of the Company's active foreign subsidiaries is the foreign subsidiary's local currency. Assets and liabilities that are not denominated in the functional currency are remeasured into the functional currency with any related gain or loss recorded in earnings. The Company translates assets and liabilities of its non-U.S. dollar functional currency foreign operations into the U.S. dollar reporting currency at exchange rates in effect at the balance sheet date. The Company translates income and expense items of such foreign operations into U.S. dollars reporting currency at average exchange rates for the period. Accumulated translation adjustments are reported in stockholders' equity, as a component of accumulated other comprehensive income (loss).

Foreign Currency Contracts. The Company operates internationally and is exposed to potentially adverse movements in currency exchange rates. The Company enters into hedges in the form of foreign currency forward contracts to reduce its exposure to foreign currency rate changes on non-functional currency denominated forecasted transactions and balance sheet positions. The Company accounts for the foreign currency forward contracts under Accounting Standard Codification (ASC) 815, Derivatives and Hedging. The assets or liabilities associated with the forward contracts are recorded at fair value in other current assets or accrued liabilities in the consolidated balance sheet.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The accounting for gains and losses resulting from changes in fair value depends on the use of the foreign currency forward contract and whether it is designated and qualifies for hedge accounting. See Note 5.

Fair Values of Financial Instruments. The Company's cash equivalents, short-term investments and foreign currency contracts are carried at fair value. The fair value of the Company's accounts receivable and accounts payable approximates the carrying amount due to their short duration. Non-marketable equity securities are carried at cost. The Company performs periodic impairment analysis over these non-marketable equity securities. See Note 6.

Cash, 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 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 (loss), net of tax. Those unrealized gains or losses deemed other than temporary are reflected in other income (expense), net. The cost of securities sold is based on the specific identification method and realized gains and losses are included in other income (expense), net. See Note 5.

Concentration of Credit Risk. Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash equivalents, marketable securities, foreign currency contracts, and accounts receivable from trade customers. The Company maintains cash equivalents primarily in highly rated taxable and tax-exempt money market funds located in the U.S. and in various overseas locations. Marketable securities consist of highly liquid investment grade municipal bonds which, by policy, are subject to duration and credit concentration limits. In addition, the Company minimizes its market risk for changes in interest rates by maintaining the portfolio of cash equivalents and investments in a mix of tax-exempt and taxable instruments that meet high credit quality standards. The Company's foreign currency contracts are diversified among investment grade, global financial institutions. See Notes 5 and 6.

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 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. Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company maintains allowances for doubtful accounts to reduce the Company's receivables to their estimated net realizable value. The Company provides a general reserve on all accounts receivable based on a review of customer accounts. The following table presents the changes in the allowance for doubtful accounts.

Fiscal Year	Balance at Beginning of Period	Provisions	Write-offs(1)	Balance at End of Period
		(in thou	ısands)	
2012	\$2,489	\$3,754	\$ (171)	\$6,072
2011	\$2,727	\$1,058	\$(1,296)	\$2,489
2010	\$3,587	\$ (899)	\$ 39	\$2,727

<sup>(1)</sup> Balances written off, net of recoveries.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

Income Taxes. The Company accounts for income taxes using 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.

The Company accounts for uncertainty in income taxes using a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining whether it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. An uncertain tax position is considered effectively settled on completion of an examination by a taxing authority if certain other conditions are satisfied.

Property and Equipment. Property and equipment is recorded at cost less accumulated depreciation. Assets, excluding land, are depreciated using the straight-line method over their estimated useful lives. Leasehold improvements are amortized using the straight-line method over the remaining term of the lease or the economic useful life of the asset, whichever is shorter. Depreciation expenses were \$52.8 million, \$51.0 million and \$50.3 million in fiscal 2012, 2011 and 2010, respectively. Repair and maintenance costs are expensed as incurred and such costs were \$23.7 million, \$20.9 million and \$19.0 million in fiscal 2012, 2011 and 2010, respectively. A detail of property and equipment is as follows:

A detail of property and equipment is as follows:

	October 31,		
	2012	2011	
	(in thousands)		
Computer and other equipment	\$ 329,376	\$ 283,893	
Buildings	70,237	53,926	
Furniture and fixtures	29,212	28,759	
Land	20,414	20,414	
Leasehold improvements	92,111	85,984	
	541,350	472,976	
Less accumulated depreciation and amortization(1)	(350,107)	(313,459)	
Total	\$ 191,243	\$ 159,517	

The useful lives of depreciable assets are as follows:

	Useful Life in Years
Computer and other equipment	3-5
Buildings	30
Furniture and fixtures	5
Leasehold improvements (average)	5

Accumulated depreciation and amortization includes write-off's due to retirement of fully amortized fixed assets.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

Goodwill. Goodwill represents the excess of the aggregate purchase price over the fair value of the net tangible and identifiable intangible assets acquired by the Company. The carrying amount of goodwill is tested for impairment annually or more frequently if facts and circumstances warrant a review. The Company determined that it is a single reporting unit for the purpose of goodwill impairment tests. For purposes of assessing the impairment of goodwill, the Company estimates the value of the reporting unit using its market capitalization as the best evidence of fair value. This fair value is then compared to the carrying value of the reporting unit. During fiscal 2012, 2011 and 2010, there were no indicators of impairment to goodwill.

Intangible Assets. Intangible assets consist of purchased technology, certain contract rights, customer relationships, trademarks and trade names, covenants not to compete, capitalized software and other intangibles. Intangible assets are amortized on a straight-line basis over their estimated useful lives which range from one to ten years.

The Company continually monitors events and changes in circumstances that could indicate carrying amounts of the long-lived assets, including property and equipment and intangible assets, may not be recoverable. When such events or changes in circumstances occur, the Company assesses the recoverability of long-lived assets by determining whether the carrying value of such assets will be recovered through the undiscounted future cash flow. If the undiscounted future cash flow is less than the carrying amount of these assets, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the assets. The Company had no impairments of any long-lived assets in fiscal 2012, 2011 or 2010.

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

	October 31,		
	2012	2011	
	(in thousands)		
Payroll and related benefits	\$299,961	\$238,691	
Other accrued liabilities	53,277	56,529	
Accounts payable	29,855	6,956	
Total	\$383,093	\$302,176	

Other Long-term Liabilities. Other long-term liabilities consist of:

	October 31,		
	2012	2011	
	(in thousands)		
Deferred compensation liability (See note 9)	\$100,645	\$ 90,060	
Other long-term liabilities	25,572	18,016	
Total	\$126,217	\$108,076	

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

Other Comprehensive Income (Loss). Other comprehensive income (loss) (OCI) includes all changes in equity during a period from non-owner sources, such as accumulated net translation adjustments, unrealized loss on certain foreign currency forward contracts that qualify as cash flow hedges, reclassification adjustments related to cash flow hedges and unrealized gain on investments. Accumulated other comprehensive income (loss), net of tax, consists of the following:

	October 31,		
	2012	2011	
	(in thou	sands)	
Unrealized gain on investments	\$ —	\$ 215	
Deferred gain (loss) on cash flow hedges	(1,338)	(12,842)	
Foreign currency translation adjustments	(14,123)	(8,318)	
	\$(15,461)	\$(20,945)	

Revenue Recognition. Software license revenue consists of fees associated with the licensing of the Company's software. Maintenance and service revenue consists of maintenance fees associated with perpetual and term licenses and professional services fees. Hardware revenue consists of Field Programmable Gate Array (FPGA) board-based products.

With respect to software licenses, the Company utilizes three license types:

- Technology Subscription Licenses (TSLs). TSLs are time-based licenses for a finite term, and generally provide the customer limited rights to receive, or to exchange certain quantities of licensed software for, unspecified future technology. The Company bundles and does not charge separately for post-contract customer support (maintenance) for the term of the license.
- Term licenses. Term licenses are also for a finite term, but do not provide the customer any
  rights to receive, or to exchange licensed software for, unspecified future technology.
   Customers purchase maintenance separately for the first year and may renew annually for
  the balance of the term. The annual maintenance fee is typically calculated as a percentage
  of the net license fee.
- Perpetual licenses. Perpetual licenses continue as long as the customer renews
  maintenance plus an additional 20 years. Perpetual licenses do not provide the customer
  any rights to receive, or to exchange licensed software for, unspecified future technology.
  Customers purchase maintenance separately for the first year and may renew annually.

For the three software license types, the Company recognizes revenue as follows:

- TSLs. The Company typically recognizes revenue from TSL fees (which include bundled maintenance) ratably over the term of the license period, or as customer installments become due and payable, whichever is later. Revenue attributable to TSLs is reported as "time-based license revenue" in the consolidated statements of operations.
- Term licenses. The Company recognizes revenue from term licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee and 100% of the maintenance fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these term licenses is reported as "upfront revenue" in the consolidated statements of operations. For term licenses in which less than 75% of the license fee and 100% of the maintenance fee is payable within one year from shipment, the Company recognizes revenue as customer payments become due and payable. Such revenue is reported as "time-based license revenue" in the consolidated statements of operations.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

• Perpetual licenses. The Company recognizes revenue from perpetual licenses in full upon shipment of the software if payment terms require the customer to pay at least 75% of the license fee and 100% of the maintenance fee within one year from shipment and all other revenue recognition criteria are met. Revenue attributable to these perpetual licenses is reported as "upfront revenue" in the consolidated statements of operations. For perpetual licenses in which less than 75% of the license fee and 100% of the maintenance fee is payable within one year from shipment, the Company recognizes revenue as customer installments become due and payable. Such revenue is reported as "time-based license revenue" in the consolidated statements of operations.

The Company also enters into arrangements in which portions of revenue are contingent upon the occurrence of uncertain future events, for example, royalty arrangements. The Company refers to this revenue as "contingent revenue." Contingent revenue is recognized if and when the applicable event occurs. Such revenue is reported as "time-based revenue" in the consolidated statements of operations. Historically, these arrangements have not been material to the Company's total revenue.

The Company recognizes revenue from hardware sales in full upon shipment if all other revenue recognition criteria are met. Revenue attributable to these hardware sales is reported as "upfront revenue" in the consolidated statements of operations. Hardware sales have not been material to the Company's total revenue.

The Company infrequently enters into multiple-element arrangements that contain both software and non-software deliverables such as hardware. On a prospective basis beginning in the first quarter of fiscal 2011, the Company applied accounting guidance for revenue arrangements with multiple deliverables to these contracts. Such arrangements have not had a material effect on the Company's consolidated financial statements and are not expected to have a material effect on subsequent periods.

The Company has determined that the software and non-software deliverables in the Company's contracts are separate units of accounting. Accordingly, the Company allocates the arrangement consideration to separate units of accounting based on estimated standalone selling prices (ESP) because the Company does not have objective evidence of standalone selling prices. The Company estimates the standalone selling prices of the Company's separate units of accounting considering both market conditions and the Company's own specific conditions. For hardware deliverables, the Company determines ESP using gross margin because the Company has consistent pricing practices and gross margins for these products. Determining the ESP for software deliverables requires significant judgment. The Company determines ESP for software deliverables after considering customer geographies, market demand and competition at the time of contract negotiation, gross margin objectives, existing portfolio pricing practices, contractually stated prices and prices for similar historical transactions.

The Company recognizes revenue for the separate units of accounting when all revenue recognition criteria are met. Revenue allocated to hardware units of accounting is recognized upon shipment when all other revenue recognition criteria are met. Revenue allocated to software units of accounting is recognized according to the methods described above depending on the software license type (TSL, term license or perpetual license).

The Company recognizes revenue from maintenance fees ratably over the maintenance period to the extent cash has been received or fees become due and payable, and recognizes revenue from

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

professional services and training fees as such services are performed and accepted by the customer. Revenue attributable to maintenance, professional services and training is reported as "maintenance and service revenue" in the consolidated statements of operations.

The Company also enters into arrangements to deliver software products, either alone or together with other products or services that require significant modification, or customization of the software. The Company accounts for such arrangements using the percentage of completion method as the Company has the ability to make reasonably dependable estimates that relate to the extent of progress toward completion, contract revenues and costs. The Company measures the progress towards completion using the labor hours incurred to complete the project. Revenue attributable to these arrangements is reported as maintenance and service revenue in the consolidated statements of operations.

The Company determines the fair value of each element in multiple element software arrangements that contain only software and software related deliverables based on VSOE. The Company limits assessment of VSOE of fair value for each element to the price charged when such element is sold separately. The Company has analyzed all of the elements included in multiple-element software arrangements and has determined that the Company has sufficient VSOE to allocate revenue to the maintenance components of the Company's perpetual and term license products and to professional services. Accordingly, assuming all other revenue recognition criteria are met, the Company recognizes license revenue from perpetual and term licenses upon delivery using the residual method, recognizes revenue from maintenance ratably over the maintenance term, and recognizes revenue from professional services as services are performed and accepted by the customer. The Company recognizes revenue from TSLs ratably over the term of the license, assuming all other revenue recognition criteria are met, since there is not sufficient VSOE to allocate the TSL fee between license and maintenance services.

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

- Persuasive Evidence of an Arrangement Exists. Prior to recognizing revenue on an arrangement, the Company's customary policy is to have a written contract, signed by both the customer and by the Company or a purchase order from those customers that have previously negotiated a standard end-user license arrangement or purchase agreement.
- Delivery Has Occurred. The Company delivers its products to its customers electronically or physically. For electronic deliveries, delivery occurs when the Company provides access to its customers to take immediate possession of the software through downloading it to the customer's hardware. For physical deliveries, the standard transfer terms are typically FOB shipping point. The Company generally ships its products or license keys promptly after acceptance of customer orders. However, a number of factors can affect the timing of product shipments and, as a result, timing of revenue recognition, including the delivery dates requested by customers and its operational capacity to fulfill product orders at the end of a fiscal quarter.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

- 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 for perpetual and term licenses require 75% or more of the license fee and 100% of the maintenance fee to be paid within one year. If the arrangement includes these terms, the Company regards the fee as fixed or determinable, and recognizes all license revenue under the arrangement in full upon delivery (assuming all other revenue recognition criteria are met). If the arrangement does not include these terms, 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, because of the right to exchange products or receive unspecified future technology and because VSOE for maintenance services does not exist for a TSL, the Company recognizes revenue ratably over the term of the license, but not in advance of when customers' installments become due and payable.
- Collectability is Probable. The Company judges collectability of the arrangement fees 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, or when an existing customer substantially expands its commitments, 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 collectability is not probable under a particular arrangement based upon its credit review process or the customer's payment history, the Company recognizes revenue under that arrangement as customer payments are actually received.

Warranties and Indemnities. The Company generally warrants its products to be free from defects in media and to substantially conform to material specifications for a period of 90 days for software products and for up to six months for hardware products. In certain cases, the Company also provides its customers with limited indemnification with respect to claims that their use of the Company's software products infringe on United States patents, copyrights, trademarks or trade secrets. The Company is unable to estimate the potential impact of these commitments on the future results of operations. To date, the Company has not been required to pay any material warranty claims.

Net Income Per Share. The Company computes basic income per share by dividing net income available to common shareholders by the weighted average number of common shares outstanding during the period. Diluted net income per share reflects the dilution from potential common shares outstanding such as stock options and unvested restricted stock units and awards during the period using the treasury stock method.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—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,							
	2012			2011		2010		
			(in th	ousands)				
Numerator: Net income Denominator:	\$18	82,402	\$2	21,364	\$2	37,063		
Weighted average common shares for basic net income per share	14	46,887	1	46,573	1	48,013		
equity—based compensation		3,393		3,794		3,898		
Weighted average common shares for diluted net income per share	150,280		150,280		1	50,367	_1	51,911
Net income per share: Basic Diluted Anti-dilutive employee stock-based awards	\$ \$	1.24 1.21	\$	1.51 1.47	\$ \$	1.60 1.56		
excluded(1)		3,314		4,669		10,999		

<sup>(1)</sup> These stock options and unvested restricted stock units were anti-dilutive for the respective periods and are excluded in calculating diluted net income per share. While such awards were anti-dilutive for the respective periods, they could be dilutive in the future.

### **Note 3. Business Combinations**

The preliminary fair value estimates for the assets acquired and liabilities assumed for certain acquisitions completed during fiscal 2012 were not yet finalized and may change as additional information become available during the respective measurement periods. The primary areas of those preliminary estimates that were not yet finalized related to certain tangible assets and liabilities, identifiable intangible assets and taxes.

### Acquisition of SpringSoft, Inc. (SpringSoft)

On August 3, 2012, the Company's wholly owned subsidiary incorporated under the laws of the Republic of China (Synopsys Taiwan), entered into a merger agreement to acquire SpringSoft, a company incorporated under the laws of the Republic of China (Taiwan).

Under the merger agreement, Synopsys Taiwan commenced a cash tender offer to acquire all of the outstanding shares of SpringSoft at a price of NT\$57.00 New Taiwan Dollars (TWD) per share. The Company acquired 91.6% of the outstanding shares of SpringSoft through the tender offer, which was completed and settled on October 1, 2012 for an aggregate cash consideration of \$373.5 million.

The remaining 8.4% of the outstanding shares along with the fair value of outstanding SpringSoft equity awards are reflected as a Non-controlling Interest (NCI) in the Company's financial statements. During the first fiscal quarter of 2013, the Company completed the acquisition of the remaining 8.4% Non-controlling Interest for \$34.1 million through a cash merger in which SpringSoft merged into Synopsys Taiwan in fiscal 2013. Certain unvested equity awards of SpringSoft were assumed and converted into equity awards of the Company at the closing of the merger. This acquisition enables the Company to strengthen and widen its offerings in design, verification and debugging tools.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The aggregate purchase price consideration was approximately US\$417.0 million. As of October 31, 2012, the total purchase consideration and the preliminary purchase price allocation were as follows:

	(in thousands)
Cash paid	\$373,519
Fair value of shares to be acquired through a follow-on merger	34,054
consideration	9,383
Total purchase consideration	\$416,956
Goodwill  Identifiable intangibles assets acquired	247,482 108,867
Cash and other assets acquired	137,222
Liabilities assumed	(76,615)
Total purchase allocation	\$416,956

Goodwill of \$247.5 million, which is generally not deductible for tax purposes, primarily resulted from the Company's expectation of sales growth and cost synergies from the integration of SpringSoft's technology and operations with the Company's technology and operations. Identifiable intangible assets, consisting primarily of technology, customer relationships, backlog and trademarks, were valued using the income method, and are being amortized over three to eight years.

Acquisition-related costs directly attributable to the business combination were \$6.6 million for fiscal 2012 and were expensed as incurred in the consolidated statements of operations. These costs consisted primarily of employee separation costs and professional services.

Fair Value of Equity Awards: Pursuant to the merger agreement, the Company assumed all the unvested outstanding stock options of SpringSoft upon the completion of the merger and the vested options were exchanged for cash in the merger. On October 1, 2012, the date of the completion of the tender offer, the fair value of the awards to be assumed and exchanged was \$9.9 million, calculated using the Black-Scholes option pricing model.

The Black-Scholes option-pricing model incorporates various subjective assumptions including expected volatility, expected term and risk-free interest rates. The expected volatility was estimated by a combination of implied and historical stock price volatility of the options.

Non-controlling Interest: Non-controlling Interest represents the fair value of the 8.4% of outstanding SpringSoft shares that were not acquired during the tender offer process completed on October 1, 2012 and the fair value of the option awards that were to be assumed or exchanged for cash upon the follow-on merger. The fair value of the Non-controlling Interest included as part of the aggregate purchase consideration was \$42.8 million and is disclosed as a separate line in the October 31, 2012 consolidated statements of stockholders' equity.

During the period between the completion of the tender offer and the end of the Company's fiscal year on October 31, 2012, the Non-controlling Interest was adjusted by \$0.5 million to reflect the Non-controlling Interest's share of the operating loss of SpringSoft in that period. As the amount is not significant, it has been included as part of other income (expense), net, in the consolidated statements of operations.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

### Acquisition of Magma Design Automation, Inc. (Magma)

On February 22, 2012, the Company acquired all outstanding shares of Magma, a chip design software provider, at a per-share price of \$7.35. Additionally, the Company assumed unvested restricted stock units (RSUs) and stock options, collectively called "equity awards." The aggregate purchase price was approximately \$550.2 million. This acquisition enables the Company to more rapidly meet the needs of leading-edge semiconductor designers for more sophisticated design tools.

As of October 31, 2012, the total purchase consideration and the preliminary purchase price allocation were as follows:

	(in thousands)
Cash paid	\$543,437
Fair value of assumed equity awards allocated to	
purchase consideration	6,797
Total purchase consideration	\$550,234
Goodwill	316,263
Identifiable intangibles assets acquired	184,300
Cash and other assets acquired	116,265
Debt and liabilities assumed	(66,594)
Total purchase allocation	\$550,234

Goodwill of \$316.3 million, which is not deductible for tax purposes, primarily resulted from the Company's expectation of sales growth and cost synergies from the integration of Magma's technology and operations with the Company's technology and operations. Identifiable intangible assets, consisting primarily of technology, customer relationships, backlog and trademarks, were valued using the income method, and are being amortized over three to ten years.

Acquisition-related costs directly attributable to the business combination totaling \$33.5 million for fiscal 2012 were expensed as incurred in the consolidated statements of operations and consist primarily of employee separation costs, contract terminations, professional services, and facilities closure costs.

Fair Value of Equity Awards Assumed. The Company assumed unvested restricted stock units (RSUs) and stock options with a fair value of \$22.2 million. The Black-Scholes option-pricing model was used to determine the fair value of these stock options, whereas the fair value of the RSUs was based on the market price on the grant date of the instruments. The Black-Scholes option-pricing model incorporates various subjective assumptions including expected volatility, expected term and risk-free interest rates. The expected volatility was estimated by a combination of implied and historical stock price volatility of the options.

Of the total fair value of the equity awards assumed, \$6.8 million was allocated to the purchase consideration and \$15.4 million was allocated to future services to be expensed over their remaining service periods on a straight-line basis.

Supplemental Pro Forma Information (Unaudited). The financial information in the table below summarizes the combined results of operations of the Company and Magma, on a pro forma basis, as though the companies had been combined as of the beginning of fiscal 2011.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The pro forma financial information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place on November 1, 2010 or of results that may occur in the future.

	rear Ended October 31,		
	2012	2011	
	(in thousands)		
Revenue(1)	\$1,798,626	\$1,682,036	
Net Income(1)	\$ 183,564(2)	\$ 165,418(2)	

Voor Ended October 21

- (1) Disclosure of the specific revenue contribution and net income of Magma subsequent to the acquisition, for the periods presented, is impracticable as the operations of Magma are integrated with the Company's operations and not separately tracked.
- (2) 2012 supplemental pro forma net income was adjusted to exclude \$33.5 million of acquisition-related costs. Corresponding periods of 2011 supplemental pro forma net income were adjusted to include these charges.

### Other Fiscal 2012 Acquisitions

During fiscal 2012, the Company acquired five other companies, including Emulation & Verification Engineering, S.A. (EVE), for cash and preliminarily allocated the total purchase consideration of \$212.9 million to the assets acquired and liabilities assumed based on their respective fair values at the acquisition dates, resulting in total goodwill of \$123.4 million, of which \$11.8 million is expected to be deductible for tax purposes. Acquired identifiable intangible assets totaling \$73.3 million were valued using appropriate valuation methods such as income or cost methods and are being amortized over their respective useful lives ranging from one to eight years. During fiscal 2012, acquisition-related costs totaling \$6.8 million were expensed as incurred in the consolidated statements of operations.

The Company continues to evaluate certain assets and liabilities related to business combinations completed within 12 months from the applicable acquisition date. Additional information, which existed as of the acquisition date but is yet unknown to the Company, may become known to the Company during the remainder of the measurement period, a period not to exceed 12 months from the acquisition date. Changes to amounts recorded as assets or liabilities will be recorded as retrospective adjustments to the provisional amounts recognized as of the acquisition date and may result in a corresponding adjustment to goodwill.

### Fiscal 2011 Acquisitions

During fiscal 2011, the Company completed two acquisitions for cash and allocated the total purchase consideration of \$37.4 million to the assets and liabilities acquired based on their respective fair values at the acquisition date resulting in goodwill of \$30.6 million. Acquired identifiable intangible assets of \$9.3 million are being amortized over two to ten years.

### Fiscal 2010 Acquisitions

Virage Logic Corporation

On September 2, 2010, the Company acquired all outstanding shares of Virage Logic Corporation (Virage). Virage was a leading provider of embedded memories with test and repair, non-volatile memories (NVMs), logic libraries, and configurable cores for control and multimedia sub-systems. The acquisition expanded the Company's DesignWare interface and analog IP portfolio.

Purchase Price. Synopsys paid \$12.00 per share for all outstanding shares, including vested awards of Virage for an aggregate cash payment of \$299.5 million, net of cash acquired. Additionally, the Company assumed unvested restricted stock units and stock appreciation rights, collectively called "stock awards."

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

Purchase Price Allocation. The Company allocated the total purchase consideration of \$316.6 million (including \$4.6 million related to stock awards assumed) to the assets acquired and liabilities assumed based on their respective fair values at the acquisition dates, including acquired identifiable intangible assets of \$96.7 million and IPR&D of \$13.2 million, resulting in total goodwill of \$210.1 million. Acquisition-related costs, consisting of professional services, severance costs, contract terminations and facilities closure costs, totaling \$13.0 million were expensed as incurred in the consolidated statements of operations. Goodwill primarily resulted from the Company's expectation of sales growth and cost synergies from the integration of Virage's technology with the Company's technology and operations to provide an expansion of products and market reach. Identifiable intangible assets consisted of technology, customer relationships, contract rights and trademarks, were valued using the income method, and are being amortized over two to ten years.

Fair Value of Stock Awards Assumed. The Company assumed unvested restricted stock units (RSUs) and stock appreciation rights (SARs) with a fair value of \$21.7 million. Of the total consideration, \$4.6 million was allocated to the purchase consideration and \$17.1 million was allocated to future services and expensed over their remaining service periods on a straight-line basis.

### Other Fiscal 2010 Acquisitions

During fiscal 2010, the Company completed seven other acquisitions for cash. The Company allocated the total purchase consideration of \$221.7 million to the assets acquired and liabilities assumed based on their respective fair values at the acquisition dates, resulting in total goodwill of \$110.8 million. Acquired identifiable intangible assets totaling \$92.8 million are being amortized over their respective useful lives ranging from one to ten years. Acquisition-related costs totaling \$10.6 million were expensed as incurred in the consolidated statements of operations.

The purchase consideration for one of the acquisitions included contingent consideration up to \$10.0 million payable upon the achievement of certain technology milestones over three years. The contingent consideration was recorded as a liability at its estimated fair value determined based on the net present value of estimated payments of \$7.8 million on the acquisition date and is being remeasured at fair value quarterly during the three-year contingency period with changes in its fair value recorded in the Company's statements of operations. There is no contingent consideration liability as of the end of fiscal 2012 relating to this acquisition.

### Note 4. Goodwill and Intangible Assets

Goodwill consists of the following:

(in thousands)
\$1,265,843
30,717
(7,274)
\$1,289,286
687,195
506
\$1,976,987

<sup>(1)</sup> Adjustments primarily relate to changes in estimates for acquisitions that closed in the prior fiscal year for which the purchase price allocation was still preliminary, and achievement of certain milestones for an acquisition that closed prior to fiscal 2010.

Intangible assets as of October 31, 2012 consisted of the following:

	Gross Assets(1)	Accumulated Amortization	Net Assets
		(in thousands)	
Core/developed technology	\$367,321	\$159,691	\$207,630
Customer relationships	179,657	48,368	131,289
Contract rights intangible	142,641	43,843	98,798
Covenants not to compete	2,530	2,354	176
Trademarks and trade names	10,900	3,793	7,107
In-process research and development			
(IPR&D)(2)	17,696	_	17,696
Capitalized software development costs	14,581	10,955	3,626
Total	\$735,326	\$269,004	\$466,322

<sup>(1)</sup> Included \$370.7 million of intangible assets acquired during fiscal 2012.

Intangible assets as of October 31, 2011 consisted of the following:

	Gross Assets	Accumulated Amortization	Net Assets
		(in thousands)	
Core/developed technology	\$226,928	\$104,391	\$122,537
Customer relationships	80,238	31,250	48,988
Contract rights intangible	33,300	19,801	13,499
Covenants not to compete	2,530	2,105	425
Trademarks and trade names	6,400	2,561	3,839
In-process research and development			
(IPR&D)(1)	3,425	_	3,425
Capitalized software development costs	11,245	7,927	3,318
Total	\$364,066	\$168,035	\$196,031

<sup>(1)</sup> IPR&D is reclassified to core/developed technology upon completion.

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

Year Ended October 31,			
2012	2011	2010	
	(in thousands)		
\$ 57,124	\$44,869	\$33,232	
17,141	13,030	9,325	
24,113	10,279	3,861	
248	222	637	
1,233	1,020	630	
2,994	2,964	2,964	
\$102,853	\$72,384	\$50,649	
	\$ 57,124 17,141 24,113 248 1,233 2,994	2012 2011 (in thousands) \$ 57,124 \$44,869 17,141 13,030 24,113 10,279 248 222 1,233 1,020 2,994 2,964	

<sup>(1)</sup> Amortization of capitalized software development costs is included in cost of license revenue in the consolidated statements of operations.

<sup>(2)</sup> IPR&D is reclassified to core/developed technology upon completion or is written off upon abandonment.

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

Fiscal Year	(in thousands)
2013	\$128,596
2014	106,745
2015	89,863
2016	56,170
2017	24,489
2018 and thereafter	42,763
IPR&D (to be amortized upon project completion or	
written off upon abandonment)(1)	17,696
Total	\$466,322

<sup>(1)</sup> IPR&D projects are estimated to be completed within two years as of October 31, 2012.

Amortization begins upon project completion or the asset is written off upon abandonment.

### Note 5. Financial Assets and Liabilities

Cash, Cash Equivalents and Investments. Short-term investments include money market funds and municipal securities and are classified as available-for-sale securities. Cash, cash equivalents and investments are detailed as follows:

	Cost	Gross Unrealized Gains	Unrealized Losses Less Than 12 Months (in thousands	Unrealized Losses 12 Months or Longer	Estimated Fair Value(1)
Balance at October 31, 2012			•	•	
Classified as current assets:					
Non-interest bearing cash (U.S. and					
International)	\$167,161	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —	\$167,161
Money market funds (U.S.)	155,000		_		155,000
Cash deposits and money market funds					
(International)	378,221				378,221
	700,382	_	_	_	700,382
Classified as other long-term assets:					
Strategic investments	11,744				11,744
Total	\$712,126	<u>\$—</u>	<u>\$—</u>	<u>\$—</u>	\$712,126

	Cost	Gross Unrealized Gains	Gross Unrealized Losses Less Than 12 Months	Gross Unrealized Losses 12 Months or Longer	Estimated Fair Value(1)
Balance at October 31, 2011			(in thousands)		
Classified as current assets:					
Non-interest bearing cash (U.S. and					
International)	\$ 149,998	\$ <i>—</i>	\$ —	\$—	\$ 149,998
Money market funds (U.S.)	55,267	_	_	_	55,267
Cash deposits and money market funds	0.40.040				0.40.040
(International)	649,812				649,812
Municipal securities	148,850	_296	_(149)		148,997
	1,003,927	296	(149)	_	1,004,074
Classified as other long-term assets:					
Strategic investments	3,982				3,982
Total	\$1,007,909	<u>\$296</u>	<u>\$(149)</u>	<u>\$—</u>	\$1,008,056

<sup>(1)</sup> See Note 6 for further discussion on fair values of money market funds, municipal securities, and strategic investments.

Strategic Investments. The Company's strategic investment portfolio consists of non-marketable equity securities in privately held companies. The cost basis of securities sold is based on the specific identification method. The securities accounted for under cost method investments are reported at cost net of impairment losses. Securities accounted for under equity method investments are recorded at cost plus the proportional share of the issuers' income or loss, which is recorded in the Company's other income (expense), net. Refer to Note 6. Fair Value Measures.

Derivatives. In accordance with ASC 815, Derivatives and Hedging, the Company recognizes derivative instruments as either assets or liabilities in the consolidated financial statements at fair value and provides qualitative and quantitative disclosures about such derivatives. The Company operates internationally and is exposed to potentially adverse movements in foreign currency exchange rates. The Company enters into hedges in the form of foreign currency forward contracts to reduce its exposure to foreign currency rate changes on non-functional currency denominated forecasted transactions and balance sheet positions including: (1) certain assets and liabilities, (2) shipments forecasted to occur within approximately one month, (3) future billings and revenue on previously shipped orders, and (4) certain future intercompany invoices denominated in foreign currencies.

The duration of forward contracts ranges from one month to 21 months, the majority of which are short-term. The Company does not use foreign currency forward contracts for speculative or trading purposes. The Company enters into foreign exchange forward contracts with high credit quality financial institutions that are rated 'A' or above and to date has not experienced nonperformance by counterparties. Further, the Company anticipates continued performance by all counterparties to such agreements.

The assets or liabilities associated with the forward contracts are recorded at fair value in other current assets or accrued liabilities in the consolidated balance sheets. The accounting for gains and losses resulting from changes in fair value depends on the use of the foreign currency forward contract and whether it is designated and qualifies for hedge accounting.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

### Cash Flow Hedging Activities

Certain foreign exchange forward contracts are designated and qualify as cash flow hedges. These contracts have durations of 21 months or less. Certain forward contracts are rolled over periodically to capture the full length of exposure to the Company's foreign currency risk, which can be up to three years. To receive hedge accounting treatment, all hedging relationships are formally documented at the inception of the hedge, and the hedges must be highly effective in offsetting changes to future cash flows on the hedged transactions. The effective portion of gains or losses resulting from changes in fair value of these hedges is initially reported, net of tax, as a component of OCI, in stockholders' equity and reclassified into revenue or operating expenses, as appropriate, at the time the hedged transactions affect earnings. We expect approximately 40% of the hedge balance in OCI to be reclassified to the statements of operations within the next twelve months.

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

### Non-designated Hedging Activities

The Company's foreign exchange forward contracts that are used to hedge non-functional currency denominated balance sheet assets and liabilities are not designated as hedging instruments. Accordingly, any gains or losses from changes in the fair value of the forward contracts are recorded in other income (expense), net. The gains and losses on these forward contracts generally offset the gains and losses associated with the underlying assets and liabilities, which are also recorded in other income (expense), net. The duration of the forward contracts for hedging the Company's balance sheet exposure is approximately one month.

The Company also has certain foreign exchange forward contracts for hedging certain international revenues and expenses that are not designated as hedging instruments. Accordingly, any gains or losses from changes in the fair value of the forward contracts are recorded in other income (expense), net. The gains and losses on these forward contracts generally offset the gains and losses associated with the foreign currency in operating income. The duration of these forward contracts is usually less than one year. The overall goal of the Company's hedging program is to minimize the impact of currency fluctuations on its net income over its fiscal year.

The effects on the changes in the fair values of non-designated forward contracts for fiscal years 2012 and 2011 are summarized as follows:

	October 31,					
	2012		2011			2010
			(in th	ousands	s)	
Gain (loss) recorded in other income (expense), net	\$	1,033	\$	889	\$	(2,815)

Foreign currency forward contracts outstanding are as follows:

	As o	As of October 31, 2012		f October 31, 2011
	(in thousands)			
Total gross notional amount	\$	618,978	\$	599,844
Net fair value	\$	390	\$	(14,695)

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The notional amounts for derivative instruments provide one measure of the transaction volume outstanding as of October 31, 2012 and October 31, 2011, respectively, and do not represent the amount of the Company's exposure to market gain or loss. The Company's exposure to market gain or loss will vary over time as a function of currency exchange rates. The amounts ultimately realized upon settlement of these financial instruments, together with the gains and losses on the underlying exposures, will depend on actual market conditions during the remaining life of the instruments.

The following represents the balance sheet location and amount of derivative instrument fair values segregated between designated and non-designated hedge instruments:

	Fair Values of derivative instruments designated as hedging instruments	Fair Values of derivative instruments not designated as hedging instruments	
	(in thousands)		
As of October 31, 2012			
Other current assets	\$ 5,149	\$ 68	
Other current liabilities	\$ 4,739	\$ 88	
As of October 31, 2011			
Other current assets	\$ 2,161	\$ <i>—</i>	
Other current liabilities	\$16,827	\$ 29	

The following table represents the income statement location and amount of gains and losses on derivative instrument fair values for designated hedge instruments, net of tax:

	Location of gain (loss) recognized in OCI on derivatives	Amount of gain (loss) recognized in OCI on derivatives (effective portion)	Location of gain (loss) reclassified from OCI	Amount of gain (loss) reclassified from OCI (effective portion)
		(in thous	ands)	
Fiscal year ended October 31, 2012				
Foreign exchange				
contracts	Revenue	\$ 5,212	Revenue	\$ (1,868)
Foreign exchange				
contracts	Operating expenses	(7,640)	Operating expenses	(12,367)
Total		\$(2,428)		\$(14,235)
Fiscal year ended October 31, 2011 Foreign exchange				
contracts	Revenue	\$(5,647)	Revenue	¢ (9.561)
Foreign exchange	Nevellue	φ(3,047)	Neveriue	\$ (8,561)
contracts	Operating expenses	(3,225)	Operating expenses	6,572
Total		\$(8,872)		\$ (1,989)

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The following table represents the ineffective portions and portions excluded from effectiveness testing of the hedge gains (losses) for derivative instruments designated as hedging instruments, which are recorded in other (expense) income, net:

Amount of gain (loss)

	Amount of gain (loss) recognized in income statement on derivatives (ineffective portion)(1)	recognized in income statement on derivatives (excluded from effectiveness testing)(2)		
	(in thousands)			
Fiscal year ended October 31, 2012				
Foreign exchange contracts	\$38	\$1,321		
Fiscal year ended October 31, 2011				
Foreign exchange contracts	\$74	\$ 241		

- (1) The ineffective portion includes forecast inaccuracies.
- (2) The portion excluded from effectiveness includes the discount earned or premium paid for the contracts.

### Other Commitments-Credit and Term Loan Facilities

On February 17, 2012, the Company entered into an amended and restated credit agreement with several lenders (the "Credit Agreement") providing for (i) a \$350.0 million senior unsecured revolving credit facility (the "Revolver") and (ii) a \$150.0 million senior unsecured term loan facility (the "Term Loan"). The Credit Agreement amended and restated the Company's previous credit agreement dated October 14, 2011 in order to add a new term loan facility primarily to finance a portion of the purchase price for the acquisition of Magma on February 22, 2012. Subject to obtaining additional commitments from lenders, the principal amount of the loans provided under the Credit Agreement may be increased by the Company by up to an additional \$150.0 million through October 13, 2015. The Credit Agreement terminates on October 14, 2016. The Credit Agreement contains financial covenants requiring the Company to operate within a maximum leverage ratio and maintain specified levels of cash, as well as other non-financial covenants. Borrowings bear interest at a floating rate based on a margin over the Company's choice of market observable base rates as defined in the Credit Agreement. At October 31, 2012, borrowings under the Revolver bore interest at LIBOR + 0.975% and borrowings under the Term Loan bore interest at LIBOR + 1.125%. In addition, commitment fees are payable on the Revolver at rates between 0.150% and 0.300% per year based on the Company's leverage ratio on the daily amount of the revolving commitment. During fiscal 2012 the Company borrowed \$250.0 million under the Credit Agreement. As of October 31, 2012, the Company had no outstanding balance under the Revolver and a \$135.0 million outstanding balance under the Term Loan, and is in compliance with all covenants. \$105.0 million of the borrowings under the Term Loan are classified as long term. Principal payments on a portion of the Term Loan are due in equal quarterly installments of \$7.5 million beginning in the third quarter of fiscal 2012, with the remainder due in October 2016. The Company can elect to make prepayments on the Term Loan, in whole or in part, without premium or penalty. During fiscal 2012, the Company made principal payments of \$100.0 million and \$15.0 million under the Revolver and Term Loan, respectively. The Company had no outstanding debt balances as of October 31, 2011. The Company expects its borrowings under the Revolver will fluctuate from quarter to quarter.

These borrowings under the Credit Agreement have a variable interest rate structure and are classified within Level 2 of the fair value hierarchy. The carrying amount of the short-term and long-term debt approximates the estimated fair value.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

### Note 6. Fair Value Measures

ASC 820-10, Fair Value Measurements and Disclosures, defines fair value, establishes guidelines and enhances disclosure requirements for fair value measurements.

The accounting guidance requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The accounting guidance also establishes a fair value hierarchy based on the independence of the source and objective evidence of the inputs used. There are three fair value hierarchies based upon the level of inputs that are significant to fair value measurement:

**Level 1**—Observable inputs that reflect quoted prices (unadjusted) for identical instruments in active markets;

**Level 2**—Observable inputs other than quoted prices included in Level 1 for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-driven valuations in which all significant inputs and significant value drivers are observable in active markets; and

**Level 3**—Unobservable inputs to the valuation derived from fair valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

On a recurring basis, the Company measures the fair value of certain of its assets and liabilities, which include cash equivalents, short-term investments, non-qualified deferred compensation plan assets, foreign currency derivative contracts, and contingent consideration associated with business combinations.

The Company's cash equivalents and short-term investments are classified within Level 1 or Level 2 because they are valued using quoted market prices in an active market or alternative independent pricing sources and models utilizing market observable inputs. During the second quarter ended April 30, 2012, the Company liquidated all of its short-term investments.

The Company's non-qualified deferred compensation plan assets consist of money market and mutual funds invested in domestic and international marketable securities that are directly observable in active markets and are therefore classified within Level 1.

The Company's foreign currency derivative contracts are classified within Level 2 because these contracts are not actively traded and the valuation inputs are based on quoted prices and market observable data of similar instruments.

The Company's borrowings under its credit and term loan facilities are classified within Level 2 because these borrowings are not actively traded and have a variable interest rate structure based upon market rates currently available to the Company for debt with similar terms and maturities. Refer to *Note 5. Financial Assets and Liabilities*.

The Company's liabilities for contingent consideration are classified within Level 3 because these valuations are based on management assumptions including discount rates and estimated probabilities of achievement of certain milestones which are unobservable in the market. The Company recorded a reduction of \$3.6 million during fiscal 2012, in research and development expenses due to the change in fair value of the liability for contingent consideration. As of October 31, 2012, the fair value of the liability for contingent consideration was estimated at \$0.8 million.

### Assets/Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities measured at fair value on a recurring basis are summarized below as of October 31, 2012:

		Fair Value Measurement Using			
Description	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
		(in tho	usands)		
Assets					
Cash equivalents:					
Money market funds	\$239,770	\$239,770	\$ —	\$ <i>—</i>	
Prepaid and other current					
assets:					
Foreign currency derivative					
contracts	5,217	_	5,217	_	
Other long-term assets:					
Deferred compensation					
plan assets	100,645	100,645			
Total assets	\$345,632	<u>\$340,415</u>	\$5,217	<u>\$—</u>	
Liabilities					
Accounts payable and accrued					
liabilities:					
Foreign currency derivative					
contracts		\$ —	\$4,827	\$ <i>—</i>	
Contingent consideration	469	_	_	469	
Other long-term liabilities:					
Contingent consideration	355			355	
Total liabilities	\$ 5,651	<u>\$ —</u>	\$4,827	\$824	

# SYNOPSYS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

Assets and liabilities measured at fair value on a recurring basis are summarized below as of October 31, 2011:

		Fair Value Measurement Using					
Description	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)			
		(in tho	usands)				
Assets							
Cash equivalents:							
Money market funds	\$543,770	\$543,770	\$ —	\$ —			
Short-term investments:							
Municipal securities	148,997	<del></del>	148,997	_			
Prepaid and other current							
assets:							
Foreign currency derivative							
contracts	2,161	_	2,161	_			
Other long-term assets:							
Deferred compensation							
plan assets	90,060	90,060					
Total assets	<u>\$784,988</u>	\$633,830	<u>\$151,158</u>	<u>\$ —</u>			
Liabilities							
Accounts payable and accrued							
liabilities:							
Foreign currency derivative							
contracts	\$ 16,856	\$ —	\$ 16,856	\$ —			
Contingent consideration	2,096	_	_	2,096			
Other long-term liabilities:							
Contingent consideration	2,200	_	_	2,200			
Total liabilities	\$ 21,152	<u> </u>	\$ 16,856	\$4,296			

## Non-Marketable Equity Securities

Equity investments in privately-held companies, also called non-marketable equity securities, are accounted for using either the cost or equity method of accounting.

These equity investments are classified within Level 3 as they are valued using significant unobservable inputs or data in an inactive market, and the valuation requires management judgment due to the absence of market price and inherent lack of liquidity. The non-marketable equity securities are measured and recorded at fair value when an event or circumstance which impacts the fair value of these securities indicates an other-than-temporary decline in value has occurred. The Company monitors these investments and generally uses the income approach to assess impairments based primarily on the financial conditions of these companies.

The Company recorded \$0.5 million, \$1.0 million, and \$0.5 million of other-than-temporary impairments during fiscal 2012, 2011 and 2010, respectively. During fiscal 2011, an equity investment with a cost basis of \$2.4 million was sold for \$3.2 million resulting in a \$0.8 million gain. This sale did not include a \$1.5 million potential earn out receivable if certain milestones are met by this former investee.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The following tables present the non-marketable equity securities that were measured and recorded at fair value within other long-term assets and the loss recorded in other income (expense), net during the following periods:

C: --- ! #! - - -- #

	 ce as of r 31, 2012	Unob In (Le	servable puts vel 3)	(los	Total ses) for cal 2012
Non-marketable equity securities	\$ _	(in thous	ands) —	\$	(452)
	 ce as of r 31, 2011	Unob: In	ificant servable puts vel 3)	(los	Total ses) for cal 2011
Non-marketable equity securities	\$ 92	(in thous	ands) 92	\$	(999)

As of October 31, 2012, the Company's non-marketable securities were \$11.7 million of which \$7.0 million and \$4.7 million were accounted for under the cost method and equity method, respectively. As of October 31, 2011 non-marketable securities of \$4.0 million were accounted for under the cost method.

#### Note 7. Commitments and Contingencies

#### Lease Commitments

The Company leases certain of its domestic and foreign facilities and certain office equipment under non-cancelable lease agreements. The lease agreements generally require the Company to pay property taxes, insurance, maintenance and repair costs. Rent expenses were \$62.0 million, \$58.1 million and \$49.7 million in fiscal 2012, 2011 and 2010, respectively. The Company charges operating lease payments to expense using the straight-line method. The Company subleases portions of its facilities and records sublease payments as a reduction of rent expense.

On October 15, 2011, the Company agreed to lease two office buildings to be constructed in Mountain View, California. Once construction is complete, the buildings together will provide approximately 341,000 square feet. The lease of such premises begins upon the later of March 1, 2015 or six months after construction is substantially completed, and expires approximately 15 years thereafter and can be extended for an additional 19 years after such initial expiration. The Company may terminate the lease if the lessor fails to substantially complete construction of the buildings by March 1, 2015.

Anticipated future minimum lease payments on all non-cancelable operating leases with a term in excess of one year, net of sublease income, as of October 31, 2012 are as follows:

	Minimum Lease Payments	Sublease Income	Net
E' 137		(in thousands)	
Fiscal Year			
2013	\$ 46,782	\$3,096	\$ 43,686
2014	43,344	122	43,222
2015	32,184	_	32,184
2016	32,040	_	32,040
2017	29,674	_	29,674
Thereafter	254,254	_	254,254
Total	\$438,278	\$3,218	\$435,060

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

#### Legal Proceedings

The Company is subject to routine legal proceedings, as well as demands, claims and threatened litigation, which arise in the normal course of its business. The ultimate outcome of any litigation is uncertain and unfavorable outcomes could have a negative impact on the Company's financial position and results of operations. The Company reviews the status of each significant matter and assesses its potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the amount is estimable, the Company accrues a liability for the estimated loss. The Company has determined that no disclosure of estimated loss is required for a claim against the Company because: (a) there is not a reasonable possibility that a loss exceeding amounts already recognized (if any) may be incurred with respect to such claim; (b) a reasonably possible loss or range of loss cannot be estimated; or (c) such estimate is immaterial.

In connection with the Company's definitive merger agreement to acquire Magma, four putative stockholder class actions were filed against Magma, Magma's board of directors, Synopsys and the Synopsys merger subsidiary on December 5, 2011, December 9, 2011, December 13, 2011, and December 19, 2011, in state court in California and Delaware, and the cases were consolidated in California state court (collectively, the Magma Lawsuits). The Magma Lawsuits allege, among other things, that Magma and its directors breached their fiduciary duties to Magma's stockholders in negotiating and entering into the definitive merger agreement and by agreeing to sell Magma at an unfair price, and that Magma and Synopsys aided and abetted these alleged breaches of fiduciary duties. On February 10, 2012, the parties entered into a memorandum of understanding (MOU) in which they agreed on the terms of a proposed settlement of the lawsuits, which would include the dismissal with prejudice of all claims against all of the defendants. Pursuant to the MOU, Magma agreed to make certain additional disclosures concerning Magma's acquisition by Synopsys, which supplemented the information provided in Magma's proxy statement filed with the Securities and Exchange Commission on January 10, 2012, and to pay certain legal fees and expenses of plaintiffs' counsel. As contemplated by the MOU, the parties entered into a stipulation of settlement, which is subject to customary conditions including court approval following notice to Magma's former stockholders. The court granted preliminary approval of such proposed settlement in September 2012. The court has scheduled a hearing regarding final approval of such proposed settlement for January 25, 2013.

On December 5, 2011, plaintiff Dynetix Design Solutions, Inc. (Dynetix) filed a patent infringement lawsuit against Synopsys in federal district court in the Northern District of California. The lawsuit alleges, among other things, that the Company's VCS functional verification tool, and more specifically its VCS multicore technology and VCS Cloud product, infringes Dynetix's United States Patent No. 6,466,898, and that such infringement is willful. The lawsuit seeks, among other things, compensatory damages and a permanent injunction. Synopsys asserted patent infringement counterclaims against Dynetix based on Dynetix's two verification products. The court held a claims construction hearing regarding the Dynetix patent in October 2012 and accepted a majority of the constructions submitted by Synopsys.

The Company acquired Emulation & Verification Engineering S.A. (EVE) on October 4, 2012. EVE and EVE-USA, Inc. (collectively, the EVE Parties) are currently defendants in three patent infringement lawsuits filed by Mentor Graphics Corporation (Mentor). Mentor filed suit against the EVE Parties in federal district court in the District of Oregon on August 16, 2010 alleging that EVE's ZeBu series of products infringes Mentor's United States Patent No. 6,876,962. Mentor filed an additional suit in federal district court in the District of Oregon on August 17, 2012 alleging that EVE's ZeBu series of products infringes Mentor's United States Patent No. 6,947,882. Both cases have been consolidated in federal district court in the District of Oregon and seek compensatory damages and a permanent

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

injunction. Mentor also filed a patent infringement lawsuit against Nihon EVE K.K. in Tokyo District Court in 2010 alleging that EVE's ZeBu series of products infringes Mentor's Japanese Patent No. P3,588,324. This case seeks compensatory damages, a permanent injunction and destruction of inventory.

On September 27, 2012, Synopsys, EVE and EVE-USA, Inc. filed an action for declaratory relief against Mentor in federal district court in the Northern District of California, seeking a determination that Mentor's United States Patents Nos. 6,009,531, 5,649,176 and 6,240,376, which were the subject of a patent infringement lawsuit filed by Mentor against EVE in 2006 and settled in the same year, are invalid and not infringed by EVE's products, and that Mentor is without right or authority to threaten or maintain suit against the plaintiffs on such patents. In addition, on September 26, 2012, Synopsys filed two *inter parties* review requests with the U.S. Patent and Trademark Office challenging the validity of Mentor's '376 and '882 patents.

#### Note 8. Stock Repurchase Program

The Company's Board of Directors (Board) previously approved a stock repurchase program pursuant to which the Company was authorized to purchase up to \$500.0 million of its common stock, and has periodically replenished the stock repurchase program to such amount. The Board replenished the stock repurchase program up to \$500.0 million on May 25, 2011. The Company repurchases shares to offset dilution caused by ongoing stock issuances from existing plans for equity compensation awards, acquisitions, and when management believes it is a good use of cash. Repurchases are transacted in accordance with Rule 10b-18 of the Securities Exchange Act of 1934 (Exchange Act) and may be made through any means including, but not limited to, open market purchases, plans executed under Rule 10b5-1(c) of the Exchange Act and structured transactions. As of October 31, 2012, \$272.4 million remained available for further repurchases under the program.

On September 30, 2011, the Company entered into an accelerated share repurchase agreement (the "September 2011 ASR") to repurchase an aggregate of \$75.0 million of the Company's common stock. Pursuant to the September 2011 ASR, the Company made a prepayment of \$75.0 million and received an initial share delivery of 1,710,376 shares of the Company's common stock. The initial share delivery was valued at \$41.7 million and was recorded as treasury stock in the consolidated balance sheet as of October 31, 2011. The remaining balance of \$33.3 million was recorded as an equity forward contract, which is included in "Capital in excess of par value" in the consolidated balance sheet as of October 31, 2011. The equity forward contract was settled with 1,105,457 shares of the Company's common stock during the first quarter of fiscal 2012. The average purchase price per share for this September 2011 ASR was \$26.64.

On January 6, 2012, the Company entered into another accelerated share repurchase agreement (the "January 2012 ASR") to repurchase an aggregate of \$40.0 million of the Company's common stock. The January equity forward contract was settled with 1,368,616 shares of the Company's common stock during the second quarter of fiscal 2012. The average purchase price per share for this January 2012 ASR was \$29.23.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The following table summarizes stock repurchase activities as well as the reissuance of treasury stock for employee stock compensation purposes:

	Year Ended October 31,				
	2012	2010			
	(in thousands, except per share pr				
Shares repurchased	2,474	15,144	8,236		
Average purchase price	\$ 29.64	\$ 26.53	\$ 22.43		
Aggregate purchase price(1)	\$73,335	\$401,836	\$184,699		
Reissuance of treasury stock	10,065	9,973	9,770		

Fiscal 2011 does not include \$33.3 million equity forward contract related to the September 2011 ASR.

#### Note 9. Employee Benefit Plans

### Employee Stock Purchase Plan

Under the Company's Employee Stock Purchase Plan (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 (1) the beginning of a rolling two-year offering period or (2) 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.

On April 3, 2012, the Company's stockholders approved an amendment to the ESPP to increase the number of shares of common stock authorized for issuance under the plan by 5.0 million shares. During fiscal 2012, 2011 and 2010, the Company issued 2.0 million, 2.2 million, and 2.5 million shares, respectively, under the ESPP at average per share prices of \$21.65, \$17.95 and \$15.32, respectively. As of October 31, 2012, 5.9 million shares of common stock were reserved for future issuance under the ESPP.

#### **Equity Compensation Plans**

2006 Employee Equity Incentive Plan. On April 25, 2006, the Company's stockholders approved the 2006 Employee Equity Incentive Plan (2006 Employee Plan), which provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights and other forms of equity compensation, including performance stock awards and performance cash awards, as determined by the plan administrator. The terms and conditions of each type of award are set forth in the 2006 Employee Plan. Options granted under this plan have a contractual term of seven years and generally vest over 4 years. On April 3, 2012, the Company's stockholders approved an amendment to increase the number of shares of common stock reserved under the 2006 Employee Plan by 5.0 million shares for future issuance. As of October 31, 2012, an aggregate of 10.2 million stock options, and 3.9 million restricted stock units were outstanding, and 7.4 million shares were available for future issuance under the 2006 Employee Plan.

As a result of the stockholders' approval of the 2006 Employee Plan, the Company's 1992 Stock Option Plan, 1998 Non-Statutory Stock Option Plan and 2005 Assumed Stock Option Plan (collectively, the Prior Plans) have been terminated for future grants. Should any options currently outstanding under such Prior Plans and plans assumed by the Company in acquisitions prior to fiscal 2006 (options to purchase 1.2 million shares are outstanding under such plans as of October 31, 2012) be cancelled or expire unexercised, the shares underlying such options shall become available for future grant under the 2006 Employee Plan.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

2005 Non-Employee Directors Equity Incentive Plan. On May 23, 2005, the Company's stockholders approved the 2005 Non-Employee Directors Equity Incentive Plan (the 2005 Directors Plan) and the reservation of 0.3 million shares of common stock for issuance thereunder. The 2005 Directors Plan provides for annual equity awards to non-employee directors in the form of either stock options or restricted stock. On April 25, 2006, the Company's stockholders approved an increase in the number of shares of common stock reserved under the 2005 Directors Plan by 0.5 million.

As of October 31, 2012, the Company has issued an aggregate of 274,230 shares of restricted stock awards with an aggregate grant date fair value of approximately \$6.2 million under the 2005 Directors Plan. Restricted stock awards vest over a period of three years. In addition, the Company granted options to purchase 123,649 shares of common stock, which vest over a period of three to four years, with an aggregate grant date fair value of \$3.3 million to non-employee directors during fiscal 2007 and fiscal 2011. As of October 31, 2012, 57,451 shares of restricted stock and 123,649 stock options were outstanding and a total of 365,464 shares of common stock were reserved for future grant under the 2005 Directors Plan.

1994 Non-Employee Directors Stock Option Plan. An aggregate of 280,000 stock options remained outstanding under the Company's 1994 Non-Employee Directors Stock Option Plan as of October 31, 2012, which expired as to future grants in October 2004.

Other Assumed Stock Plans through Acquisitions. In connection with the Company's acquisitions in fiscal 2008, fiscal 2010, and fiscal 2012, the Company assumed certain outstanding share-based awards of acquired companies. The total amount of shares of the Company's common stock subject to such assumed equity awards was 3.5 million. If these equity awards are canceled, forfeited or expire unexercised, they do not become available for future grant. As of October 31, 2012, 0.7 million shares of the Company's common stock remained subject to such outstanding assumed equity awards.

Restricted Stock Units. Since fiscal 2007, restricted stock units are granted as part of the Company's new hire and annual incentive compensation program under the 2006 Employee Plan. Restricted stock units are valued based on the closing price of the Company's common stock on the grant date. In general, for non-executive officers, restricted stock units vest over three to four years and are subject to the employees' continuing service to the Company. For each restricted stock unit granted under the 2006 Employee Plan, a share reserve ratio is applied for the purpose of determining the remaining number of shares reserved for future grants under the plan. Prior to the second quarter of fiscal 2009, the share reserve ratio was 1.36 for each restricted stock unit granted, and an equivalent of 1.36 shares was deducted from the share reserve for each restricted stock unit issued. Likewise, each forfeited restricted stock unit increased the number of shares available for issuance by the applicable rate at the time of forfeiture. In the second quarter of fiscal 2010, the Company's stockholders approved an amendment of the 2006 Employee Plan to prospectively change the reserve ratio from 1.36 to 2.18. On March 24, 2011, the stockholders approved an amendment of the 2006 Employee Plan to prospectively change the reserve ratio from 2.18 to 1.25. On April 3, 2012, the stockholders approved amending the share reserve ratio from 1.25 to 1.50.

# SYNOPSYS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The following table contains information concerning activities related to restricted stock units:

	Restricted Stock Units	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Life (In Years)	Aggregate Fair Value
	(in the	ousands, except per sl	nare and life amo	unts)
Balance at October 31, 2009	3,133	\$22.63	1.41	
Granted	1,228	\$22.00		
Assumed(1)	713	\$23.69		
Vested(2)	(1,221)	\$22.40		\$27,345
Forfeited	(123)	\$22.51		
Balance at October 31, 2010	3,730	\$22.71	1.41	
Granted	1,483	\$26.89		
Vested(2)	(1,522)	\$23.11		\$35,164
Forfeited	(237)	\$23.49		
Balance at October 31, 2011	3,454	\$24.28	1.48	
Granted	1,813	\$29.52		
Assumed(1)	353	\$30.33		
Vested(2)	(1,508)	\$24.14		\$36,402
Forfeited	(192)	\$26.70		
Balance at October 31, 2012	3,920	\$27.18	1.52	

<sup>(1)</sup> The Company assumed restricted stock units outstanding under various plans through acquisitions.

<sup>(2)</sup> The number of vested restricted stock units includes shares that were withheld on behalf of employees to satisfy the statutory tax withholding requirements.

## SYNOPSYS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The following table contains additional information concerning activities related to stock options and restricted stock units under all equity plans, other than shares available for grant under the 2005 Directors Plan:

		Options(2)					
	Available for Grant(3)	Options Outstanding	Weighted- Average Exercise Price per Share	Weighted- Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value		
	•	•	except per share an	,			
Balance at October 31, 2009	6,703	25,818	\$21.22	2.89	\$58,267		
Options Granted	(1,995)	1,995	\$21.30				
Options Assumed(2)		456	\$18.10				
Options Exercised		(6,465)	\$18.16				
Options Canceled/forfeited/expired	372	(620)	\$23.19				
Restricted stock units granted(1)	(2,677)						
Restricted stock units forfeited(1)	203						
Additional shares reserved							
Balance at October 31, 2010	2,606	21,184	\$21.83	2.80	\$90,013		
Options Granted	(2,228)	2,270	\$26.07				
Options Exercised	,	(6,800)	\$20.53				
Options Canceled/forfeited/expired	550	(694)	\$27.24				
Restricted stock units granted(1)	(2,182)						
Restricted stock units forfeited(1)	165						
Additional shares reserved	7,000						
Balance at October 31, 2011	5,911	15,960	\$22.76	2.97	\$74,068		
Options Granted	(1,719)	1,719	\$28.86		, , , , , , , , , , , , , , , , , , , ,		
Options Assumed(2)	, ,	382	\$19.15				
Options Exercised		(7,103)	\$21.09				
Options Canceled/forfeited/expired	631	(739)	\$25.07				
Restricted stock units granted(1)	(2,638)						
Restricted stock units forfeited(1)	167						
Additional shares reserved	5,000						
Balance at October 31, 2012	7,352	10,219	<u>=====</u> \$24.64	3.71	\$80,950		
Vested and expected to vest as of	1,002	10,210	Ψ= 1.0 1	0.7 1	Ψ00,000		
October 31, 2012		10,135	\$24.62	3.69	\$80,526		
· ·							
Exercisable at October 31, 2012		6,337	\$23.87	2.61	\$55,118		

<sup>(1)</sup> These amounts do not reflect the actual number of restricted stock units granted or forfeited but rather the effect on the total remaining shares available for future grants after the application of the share reserve ratio. For more information about the share reserve ratio, please see *Restricted Stock Units* above.

<sup>(2)</sup> The Company assumed options and stock appreciation rights (SARs) outstanding under various plans through acquisitions.

<sup>(3)</sup> Excluding shares reserved for future issuance under the 2005 Directors Plan.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value based on stock options with an exercise price less than the Company's closing stock price of \$32.55 as of October 31, 2012. The pretax intrinsic value of options exercised and their average exercise prices were:

	Year Ended October 31,				
	2012	2011	2010		
	(in thousands, except per share pric				
Exercise value	\$63,048	\$42,388	\$29,788		
Average exercise price per share	\$ 21.09	\$ 20.53	\$ 18.16		

The following table summarizes information about stock options outstanding as of October 31, 2012:

		Options Outstanding			able Options
Range of Exercise Prices	Number Outstanding	Weighted-Average Remaining Contractual Life (In Years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
	(in thousands)			(in thousands)	
\$ 3.60 - \$19.28	1,289	2.89	\$16.58	1,147	\$16.63
\$19.32 - \$21.10	1,055	2.66	\$20.82	790	\$20.76
\$21.18 - \$23.39	1,391	4.68	\$22.03	599	\$21.76
\$23.45 - \$26.09	1,219	2.17	\$24.71	1,131	\$24.68
\$26.17 - \$26.56	1,232	3.53	\$26.40	792	\$26.32
\$26.66 - \$27.14	1,505	4.05	\$27.04	869	\$27.05
\$27.43 - \$29.62	1,033	5.22	\$27.88	340	\$28.29
\$29.80 - \$40.56	_1,495	4.28	\$30.54	_669	\$31.16
	10,219	3.71	\$24.64	6,337	\$23.87

Restricted stock award activities during fiscal 2012 under the 2005 Director Plan are summarized as follows:

	Restricted Shares	Weighted-Average Grant Date Fair Value
	(ii	n thousands)
Unvested at October 31, 2011	54	\$24.73
Granted	28	\$31.04
Vested	(25)	\$23.66
Forfeited	_	\$ —
Unvested at October 31, 2012	<u>57</u>	\$28.28

Valuation and Expense of Stock Compensation. The Company estimates the fair value of stock based awards in the form of stock options, employee stock purchases under employee stock purchase plans, restricted stock, and restricted stock units on the grant date. The value of awards expected to vest is recognized as expense over the applicable service periods. The Company uses the straight-line attribution method to recognize stock compensation costs over the service period of the award. The Company uses the Black-Scholes option-pricing model to determine the fair value of stock options, stock appreciation rights and employee stock purchase plans awards under ASC 718, Compensation—Stock Compensation. The Black-Scholes option-pricing model incorporates various subjective assumptions including expected volatility, expected term and interest rates. The expected volatility for

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

both stock options and stock purchase rights under the ESPP is estimated by a combination of implied volatility for publicly traded options of the Company's common stock with a term of six months or longer and the historical stock price volatility over the estimated expected term of the Company's stock-based awards. The expected term of the Company's stock-based awards is based on historical experience.

The assumptions presented in the following table were used to estimate the fair value of stock options and employee stock purchase rights granted under the Company's stock plans or stock plans assumed from acquisitions:

		Year Ended October 31,	
	2012	2011	2010
Stock Options			
Expected life (in years)	1.0 - 4.9	4.8	3.65 - 5.73
Risk-free interest rate	0.22% - 0.95%	0.96% - 2.28%	1.08% - 2.57%
Volatility	22.65% - 29.76%	26.96% - 30.30%	26.92% - 30.76%
Weighted average			
estimated fair value	\$8.46	\$7.04	\$7.10
ESPP			
Expected life (in years)	0.5 - 2.0	0.5 - 2.0	0.5 - 2.0
Risk-free interest rate	0.16% - 0.34%	0.09% - 0.68%	0.18% - 0.78%
Volatility	21.95% - 23.20%	19.48% - 27.08%	22.4% - 31.27%
Weighted average			
estimated fair value	\$8.02	\$6.82	\$6.16

The following table presents stock compensation expense for fiscal 2012, 2011 and 2010, respectively:

	Year Ended October 31,				١,	
		2012		2011		2010
			(in tl	housands)		
Cost of license	\$	6,927	\$	5,658	\$	6,497
Cost of maintenance and service		1,727		1,416		1,908
Research and development expense		32,767		26,747		26,551
Sales and marketing expense		13,566		11,068		12,372
General and administrative expense		16,427		11,525		12,660
Stock compensation expense before taxes		71,414		56,414		59,988
Income tax benefit	(	15,989)	_(	14,798)	_(	14,525)
Stock compensation expense after taxes	\$	55,425	\$	41,616	\$	45,463

As of October 31, 2012, the Company had \$107.1 million of total unrecognized stock compensation expense relating to options and restricted stock units and awards, which is expected to be recognized over a weighted average period of 2.5 years.

The cash flows resulting from the tax benefits for tax deductions in excess of the compensation expense recorded for the options (excess tax benefits) are classified as cash flows from financing activities. The Company has not recorded any excess tax benefits in fiscal periods 2012, 2011 and 2010.

Deferred Compensation Plan. The Company maintains the Synopsys Deferred Compensation Plan (the Deferred Plan), which permits eligible employees to defer up to 50% of their annual cash

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

base compensation and up to 100% of their eligible cash variable compensation. Amounts may be withdrawn from the Deferred Plan pursuant to elections made by the employees in accordance with the terms of the plan. Since the inception of the Deferred Plan, the Company has not made any matching or discretionary contributions to the Deferred Plan. There are no Deferred Plan provisions that provide for any guarantees or minimum return on investments. Undistributed amounts under the Deferred Plan are subject to the claims of the Company's creditors. The securities held by the Deferred Plan are classified as trading securities.

Deferred Plan Assets and Liabilities are as follows:

	As of October 31, 2012	As of October 31, 2011
	(In tho	usands)
Plan assets recorded in other long-term assets Plan liabilities recorded in other long-term	\$100,645	\$90,060
liabilities(1)	\$100,645	\$90,060

<sup>(1)</sup> For undistributed deferred compensation due to participants.

Income or loss from the change in fair value of the Deferred Plan assets is recorded in other income (expense), net. The increase or decrease in the fair value of the undistributed Deferred Plan obligation is recorded in total cost of revenue and operating expense. The following table summarizes the impact of the Deferred Plan:

	Year Ended October 31,		
	2012	2011	2010
	(	in thousands	s)
Increase (reduction) to cost of revenue and operating			
expense	\$7,498	\$2,449	\$9,426
Other income (expense), net	7,498	2,449	8,810
Net increase (decrease) to net income	<u> </u>	<u> </u>	\$ (616)

Other Retirement Plans. The Company sponsors various retirement plans for its eligible U.S. and non-U.S. employees. Total contributions to these plans were \$23.2 million, \$21.4 million and \$14.7 million in fiscal 2012, 2011 and 2010, respectively. For employees in the United States and Canada, the Company matches pretax employee contributions up to a maximum of US \$1,500 and Canadian \$4,000, respectively, per participant per year.

#### **Note 10. Income Taxes**

The domestic and foreign components of the Company's total income before provision for income taxes are as follows:

	Year Ended October 31,			
	2012	2011	2010	
		(in thousands)		
United States	\$ 39,855	\$ 40,434	\$ 57,795	
Foreign	161,280	178,679	140,863	
	\$201,135	\$219,113	\$198,658	

# SYNOPSYS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

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

	Year Ended October 31,			
	2012	2011	2010	
		(in thousands)		
Current:				
Federal	\$(12,443)	\$ (6,436)	\$(17,097)	
State	(547)	(2,197)	8	
Foreign	6,826	474	25,421	
	(6,164)	(8,159)	8,332	
Deferred:				
Federal	22,506	(7,160)	(25,156)	
State	14	(2,456)	(9,309)	
Foreign	2,377	15,524	(12,272)	
	24,897	5,908	(46,737)	
Provision (Benefit) for income taxes	\$ 18,733	\$ (2,251)	\$(38,405)	

The provision (benefit) for income taxes differs from the taxes computed with the statutory federal income tax rate as follows:

	Year Ended October 31,			
	2012	2011	2010	
		(in thousands)		
Statutory federal tax	\$ 70,397	\$ 76,689	\$ 69,530	
State tax (benefit), net of federal effect	1,078	(4,988)	(2,491)	
Tax credits	(4,289)	(19,042)	(7,451)	
Tax exempt income	(41)	(354)	(1,479)	
Tax on foreign earnings less than U.S. statutory				
tax	(21,288)	(28,968)	(11,615)	
Tax settlements	(36,882)	(32,782)	(73,045)	
Stock based compensation	9,016	7,817	5,336	
Changes in valuation allowance	10	49	(21,612)	
Other	732	(672)	4,422	
	\$ 18,733	\$ (2,251)	<u>\$(38,405)</u>	

## SYNOPSYS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The significant components of deferred tax assets and liabilities were as follows:

	October 31,		
	2012	2011	
	(in thou	ısands)	
Net deferred tax assets:			
Deferred tax assets:	¢ 20 247	¢ 46.074	
Accruals and reserves	\$ 30,317	\$ 16,274	
Deferred componentian	46,247	47,603	
Deferred compensation	39,186	36,975	
Capitalized costs	94,031	98,420	
Capitalized research and development costs	48,059 21,229	45,710 32,186	
Stock compensation	73,492	36,515	
Tax loss carryovers  Foreign tax credit carryovers	10,766	23,759	
Research and other tax credit carryovers	88,973	74,110	
Capital loss carryovers	00,970	1,896	
Other	2,449	1,349	
Gross deferred tax assets	454,749	414,797	
Valuation allowance	(26,259)	(13,395)	
Total deferred tax assets  Deferred tax liabilities:	428,490	401,402	
Intangible assets	116,639	49,948	
Undistributed earnings of foreign subsidiaries	831	12,631	
Total deferred tax liabilities	117,470	62,579	
Net deferred tax assets	\$311,020	\$338,823	

The valuation allowance increased by \$12.9 million which is related principally to acquired deferred tax assets and state research credits. It is more likely than not that the results of future operations will generate sufficient taxable income to realize the remaining deferred tax assets.

The Company has the following tax loss and credit carryforwards available to offset future income tax liabilities:

Francisco di con

Carryforward	Amount	Date
	(in thousands)	
Federal net operating loss carryforward	\$177,517	2018-2031
Federal research credit carryforward	93,932	2017-2032
Foreign tax credit carryforward	15,598	2015-2021
California research credit carryforward	95,126	Indefinite
Other state research credit carryforward	8,021	2013-2032
State net operating loss carryforward	206,203	2013-2031

The federal and state net operating loss carryforward is from acquired companies and the annual use of such loss is subject to significant limitations under Internal Revenue Code Section 382. Foreign tax credits may only be used to offset tax attributable to foreign source income. The federal research tax credit expired as of December 31, 2011.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

The Company has unrecognized deferred tax assets of approximately \$48.2 million as of October 31, 2012 attributable to excess tax deductions related to stock options, the benefit of which will be credited to equity when realized.

The Company has not provided taxes for undistributed earnings of its foreign subsidiaries except to the extent that the Company does not plan to reinvest such earnings indefinitely outside the United States. If the cumulative foreign earnings exceed the amount the Company intends to reinvest in foreign countries in the future, the Company would provide for taxes on such excess amount. As of October 31, 2012, there were approximately \$615.2 million of earnings upon which U.S. income taxes of approximately \$135.8 million have not been provided for.

The gross unrecognized tax benefits decreased by approximately \$68.2 million during fiscal 2012, resulting in gross unrecognized tax benefits of \$109.7 million as of October 31, 2012. A reconciliation of the beginning and ending balance of gross unrecognized tax benefits is summarized as follows:

	As of October 31, 2012	As of October 31, 2011
	(in tho	usands)
Beginning balance	\$177,893	\$213,923
Increases in unrecognized tax benefits related to		
prior year tax positions	6,053	4,188
Decreases in unrecognized tax benefits related to		
prior year tax positions	(35,010)	(44,061)
Increases in unrecognized tax benefits related to		
current year tax positions	9,431	19,922
Decreases in unrecognized tax benefits related to		
settlements with taxing authorities	(80,137)	(1,258)
Reductions in unrecognized tax benefits due to		
lapse of applicable statute of limitations	(3,499)	(15,200)
Increases in unrecognized tax benefits		
acquired	35,171	350
Changes in unrecognized tax benefits due to		
foreign currency translation	(222)	29
	\$109,680	\$177,893

As of October 31, 2012 and 2011, approximately \$75.3 million and \$177.5 million, respectively, of the unrecognized tax benefits would affect our effective tax rate if recognized upon resolution of the uncertain tax positions.

Interest and penalties related to estimated obligations for tax positions taken in the Company's tax returns are recognized as a component of income tax expense (benefit) in the consolidated statements of operations and totaled approximately \$(5.8) million, \$2.8 million and \$3.4 million for fiscal 2012, 2011 and 2010, respectively. As of October 31, 2012 and 2011, the combined amount of accrued interest and penalties related to tax positions taken on the Company's tax returns was approximately \$0.6 million and \$7.4 million, respectively.

The timing of the resolution of income tax examinations is highly uncertain as well as the amounts and timing of various tax payments that are part of the settlement process. This could cause large fluctuations in the balance sheet classification of current and non-current assets and liabilities. During fiscal 2012 there were significant changes to the Company's total gross unrecognized tax benefits as a

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

result of the IRS settlement and Taiwan settlement described below. The Company believes that in the coming 12 months, it is reasonably possible that either certain audits will conclude or the statute of limitations on certain state and foreign income and withholding taxes will expire, or both. Given the uncertainty as to ultimate settlement terms, the timing of payment and the impact of such settlements on other uncertain tax positions, the range of the estimated potential decrease in underlying unrecognized tax benefits is between \$0 and \$16 million.

The Company's subsidiaries remain subject to tax examination in the following jurisdictions:

Jurisdiction	Year(s) Subject to Examination
United States—Synopsys	Fiscal 2012
United States—Magma Design Automation	Fiscal years after 2008
California—Synopsys	Fiscal years after 2007
California—Magma Design Automation	Fiscal years after 2007
Hungary	Fiscal years after 2005
Taiwan and Japan	Fiscal years after 2006
Ireland	Fiscal years after 2007

In addition, the Company has made acquisitions with operations in several of its significant jurisdictions which may have years subject to examination earlier than the years indicated in the above table.

#### IRS Examinations

In the third quarter of fiscal 2012, the Company reached a final settlement with the Examination Division of the IRS for its audits of fiscal years 2010 and 2011. As a result of the settlement, the Company's unrecognized tax benefits decreased by \$24.7 million and the impact to other balance sheet tax accounts was not material. The net tax benefit resulting from the settlement was \$15.9 million.

The Company is regularly audited by the IRS. In the second quarter of fiscal 2011, the Company reached a final settlement with the Examination Division of the IRS for its audits of fiscal years 2006 through 2009. As a result of the settlement, the Company's unrecognized tax benefits decreased by \$35.9 million and the impact to other balance sheet tax accounts was not material. The net tax benefit resulting from the settlement was \$32.8 million.

The audit of certain returns filed by Synplicity, Inc. prior to its acquisition by the Company in May 2008 was finalized in the first quarter of fiscal 2011, which resulted in a decrease in unrecognized tax benefits of \$4.0 million.

In fiscal 2010, the Company reached a settlement with the IRS that resolved certain disputes related to the Company's acquisition of Avant! Corporation in 2002 that arose in the audit of its fiscal years 2002 through 2004. This settlement resulted in a decrease in the Company's tax expense for fiscal 2010 of approximately \$94.3 million, which is primarily due to the release of previously established tax liabilities of \$67.8 million, as well as a release of a valuation allowance of \$21.6 million for foreign tax credits which were utilized in connection with the settlement.

In fiscal 2010, as a result of the IRS settlement of fiscal years 2002 through 2004, the Company's net deferred tax assets increased by \$55.4 million. The change is due primarily to increases in its

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

deferred tax assets of \$72.3 million for certain costs that have been capitalized for tax purposes and will be amortized in future periods, partially offset by a decrease to deferred tax assets of \$25.2 million, due to the use of the Company's foreign tax credit carryover, net of the reversal of a valuation allowance.

#### Non-U.S. Examinations

#### Taiwan

On June 21, 2012, the Company reached a settlement with the Taiwan tax authorities for fiscal 2008 with regard to certain transfer pricing issues. As a result of the settlement and the application of the settlement to other open fiscal years, the Company's unrecognized tax benefits decreased by \$16.5 million. The net tax benefit resulting from the settlement and the application to other open fiscal years was \$14.7 million.

Taiwan is being audited for fiscal years 2009 and 2010. The Company believes that it has adequately provided for potential tax adjustments, including interest and potential penalties.

#### Hungary

On March 5, 2012, the Company reached a settlement with the Hungarian tax authorities with regard to its fiscal years 2006 through 2008. The settlement resulted in a \$5.1 million cash payment.

On May 10, 2012 the Company reached a settlement with the Hungarian tax authorities for fiscal years 2009 and 2010. The settlement resulted in a \$6.3 million benefit principally from interest in the second quarter, a \$3.2 million reduction to prepaid taxes in the third quarter, and a cash payment of \$10.9 million in the fourth quarter of fiscal 2012.

The settlements of fiscal years 2006 through 2010 reduced unrecognized tax benefits by \$27.0 million and \$24.2 million in the second and third quarter of fiscal 2012, respectively.

#### Note 11. Other Income (Expense), Net

The following table presents the components of other income (expense), net:

	Year Ended October 31,		
	2012	2011	2010
	(i	n thousands	
Interest income	\$ 1,567	\$2,117	\$ 5,396
Interest expense	(1,991)	(101)	(251)
Gain (loss) on assets related to deferred			
compensation plan	7,498	2,426	8,810
Foreign currency exchange gain (loss)	1,676	1,655	(1,514)
Other, net	2,361	173	2,107
Total	\$11,111	\$6,270	\$14,548

#### Note 12. Segment Disclosure

ASC 280, Segment Reporting, requires disclosures of certain information regarding operating segments, products and services, geographic areas of operation and major customers. Segment reporting is based upon the "management approach," i.e., how management organizes the Company's

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—Continued

operating segments for which separate financial information is (1) available and (2) evaluated regularly by the Chief Operating Decision Makers (CODMs) in deciding how to allocate resources and in assessing performance. Synopsys' CODMs are the Company's two Co-Chief Executive Officers.

The Company provides software products and consulting services in the EDA software industry. The Company operates in a single segment. In making operating decisions, the CODMs primarily consider consolidated financial information, accompanied by disaggregated information about revenues by geographic region. Specifically, the CODMs consider where individual "seats" or licenses to the Company's products are used in allocating revenue to particular geographic areas. Revenue is defined as revenues from external customers. Goodwill is not allocated since the Company operates in one reportable operating segment. Revenues and property and equipment, net, related to operations in the United States and other by geographic areas were:

	Year Ended October 31,					
	2012			2011		2010
			(in	thousands)		
Revenue:						
United States	\$	834,191	\$	714,036	\$	667,956
Europe		225,797		207,071		183,831
Japan		289,420		275,174		256,454
Asia Pacific and Other		406,609		339,362		272,420
Consolidated	\$	1,756,017	\$	1,535,643	\$1	,380,661
				As of Octo	ober 31	,
				2012	20	11
				(in thous	ands)	
Property and Equipment, net:						
United States			\$1	33,148	\$121	,101
Other countries				58,095	38	,416
Total			\$1	91,243	\$159	,517

Geographic revenue data for multiregional, multi-product transactions reflect internal allocations and are therefore subject to certain assumptions and to the Company's methodology.

One customer, in the aggregate, accounted for 10.5%, 10.6%, and 10.9% of the Company's consolidated revenue in fiscal 2012, 2011 and 2010, respectively.

## Note 13. Effect of New Accounting Pronouncements

In September 2011, the FASB issued guidance regarding goodwill impairment tests. The new guidance states that a "qualitative" assessment may be performed to determine whether further impairment testing is necessary. The new guidance will be effective in the first quarter of fiscal 2013 and early adoption is permitted. The Company does not believe the adoption of the guidance will have a material impact on its consolidated financial statements.

In July 2012, the FASB issued guidance regarding indefinite-lived intangibles impairment tests. The new guidance states that a "qualitative" assessment may be performed to determine whether further impairment testing is necessary. The new guidance will be effective in the first quarter of fiscal 2013 and early adoption is permitted. The Company does not believe the adoption of the guidance will have a material impact on its consolidated financial statements.

## 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, 2012, Synopsys carried out an evaluation under the supervision and with the participation of Synopsys' management, including the Co-Chief Executive Officers 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. Our Co-Chief Executive Officers and Chief Financial Officer have concluded that, as of October 31, 2012, (1) Synopsys' disclosure controls and procedures were designed to provide reasonable assurance of achieving their objectives, and (2) Synopsys' 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, and that such information is accumulated and communicated to Synopsys' management, including the Co-Chief Executive Officers and Chief Financial Officer, to allow timely decisions regarding its required disclosure.
- (b) Management's Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) for Synopsys.
  Under the supervision and with the participation of our management, including our Co-Chief Executive Officers and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of October 31, 2012. We excluded from our evaluation the internal control over financial reporting of SpringSoft, Inc. (SpringSoft), which Synopsys acquired a controlling interest in as of October 1, 2012, and Emulation & Verification Engineering, S.A. (EVE), which Synopsys acquired on October 4, 2012. These acquisitions are discussed in Note 3 of Notes to Consolidated Financial Statements. As of October 31, 2012, SpringSoft and EVE represented, in the aggregate, less than 4% and 1% of consolidated total assets and total revenue, respectively, for the fiscal year ended October 31, 2012.
  - In assessing the effectiveness of our internal control over financial reporting, our management used the framework established in *Internal Control Integrated Framework* issued by The Committee of Sponsoring Organizations of the Treadway Commission (COSO). Our management has concluded that, as of October 31, 2012, our internal control over financial reporting was effective based on these criteria. Our independent registered public accounting firm, KPMG LLP, has issued an auditors' report on the effectiveness of our internal control over financial reporting, which is included herein.
- (c) Changes in Internal Control Over Financial Reporting. There were no changes in Synopsys' internal control over financial reporting during the fiscal quarter ended October 31, 2012 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, Executive Officers and Corporate Governance

For information with respect to our executive officers, see *Executive Officers of the Registrant* in Part I, Item 1 of this Annual Report.

All other information required by this Item is incorporated by reference herein from our definitive Proxy Statement for the 2013 Annual Meeting of Stockholders (the Proxy Statement) scheduled to be held on April 3, 2013.

## Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference from the Proxy Statement.

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

The information required by this Item is incorporated herein by reference from the Proxy Statement.

## Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item is incorporated herein by reference from the Proxy Statement.

## Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated herein by reference from the Proxy Statement.

## **PART IV**

## Item 15. Exhibits and Financial Statement Schedules

- (a) The following documents are filed as part of this Form 10-K:
  - (1) Financial Statements

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

	Page
Report of Independent Registered Public Accounting Firm	
Consolidated Balance Sheets	
Consolidated Statements of Operations	47
Consolidated Statements of Stockholders' Equity and Comprehensive Income	48
Consolidated Statements of Cash Flows	49
Notes to Consolidated Financial Statements	50

- (2) Financial Statement Schedules
  - None.
- (3) Exhibits

See Item 15(b) below.

(b) Exhibits

## **EXHIBIT INDEX**

F		Incorporated By Reference			Filed or	
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Furnished Herewith
2.1	Agreement and Plan of Merger among Synopsys, Inc., Magma Design Automation, Inc. and Lotus Acquisition Corp. dated November 30, 2011	8-K	000-19807	2.1	12/01/11	
3.1	Amended and Restated Certificate of Incorporation	10-Q	000-19807	3.1	09/15/03	
3.2	Amended and Restated Bylaws	8-K	000-19807	3.2	05/23/12	
4.1	Specimen Common Stock Certificate	S-1	33-45138	4.3	02/24/92 (effective date)	
10.1	Form of Indemnification Agreement for directors and executive officers	8-K	000-19807	99.2	07/14/11	
10.2	Director's and Officer's Insurance and Company Reimbursement Policy	S-1	33-45138	10.2	02/24/92 (effective date)	
10.3	Lease Agreement, dated August 17, 1990, between Synopsys, Inc. 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, ("The August 17, 1990 Lease")	S-1	33-45138	10.6	02/24/92 (effective date)	
10.3(i)	Amendment No. 1 to The August 17, 1990 Lease	10-K	000-19807	10.13	12/21/07	
10.3(ii)	Amendment No. 2 to The August 17, 1990 Lease					Χ
10.3(iii)	Amendment No. 3 to The August 17, 1990 Lease	10-K	000-19807	10.12	12/21/07	
10.3(iv)	Amendment No. 4 to The August 17, 1990 Lease					Х
10.3(v)	Amendment No. 5 to The August 17, 1990 Lease	10-K	000-19807	10.11	12/21/07	
10.3(vi)	Amendment No. 6 to The August 17, 1990 Lease	10-K	000-19807	10.10	12/21/07	
10.4*	Deferred Compensation Plan as restated effective August 1, 2002	10-Q	000-19807	10.5	06/10/04	
10.5	Lease Agreement, dated June 16, 1992, between Synopsys, Inc. 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, ("The June 16, 1992 Lease")	10-K	000-19807	10.15	Fiscal year ended September 30, 1992	

Evhihit			Incorpora	ated By Re	ference	Filed or Furnished
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
0.5(i)	Amendment No. 1 to The June 16, 1992 Lease					X
0.5(ii)	Amendment No. 2 to The June 16, 1992 Lease					Χ
0.5(iii)	Amendment No. 3 to The June 16, 1992 Lease	10-K	000-19807	10.15	12/21/07	
0.5(iv)	Amendment No. 4 to The June 16, 1992 Lease	10-K	000-19807	10.14	12/21/07	
0.6	Lease Agreement, dated June 23, 1993, between Synopsys, Inc. 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, ("The June 23, 1993 Lease")	10-K	000-19807	10.16	Fiscal year ended September 30, 1993	
0.6(i)	Amendment No. 1 to The June 23, 1993 Lease					Χ
0.6(ii)	Amendment No. 2 to The June 23, 1993 Lease	10-K	000-19807	10.17	12/21/07	
0.6(iii)	Amendment No. 3 to The June 23, 1993 Lease	10-K	000-19807	10.16	12/21/07	
0.7	Lease Agreement, dated August 24, 1995, between Synopsys, Inc. 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, ("The August 24, 1995 Lease")	10-K	000-19807	10.21	Fiscal year ended September 30, 1995	
0.7(i)	Amendment No. 1 to The August 24, 1995 Lease	10-K	000-19807	10.18	12/21/07	
0.8	Lease Agreement, dated January 2, 1996 between Synopsys, Inc. and Tarigo-Paul, a California Limited Partnership, ("The January 2, 1996 Lease")	10-Q	000-19807	10.28	05/14/96	
0.8(i)	First Amendment to The January 2, 1996 Lease	8-K	000-19807	10.42	09/12/06	
0.8(ii)	Second Amendment to The January 2, 1996 Lease	8-K	000-19807	10.41	09/12/06	
).8(iii)	Third Amendment to The January 2, 1996 Lease					Х
0.8(iv)	Fourth Amendment to The January 2, 1996 Lease					Χ

Exhibit			Incorporated	By Refere	nce	Filed or Furnished
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.8(v)	Notification of Change of Ownership of Leased Premises under The January 2, 1996 Lease—Effective September 25, 2012					X
10.9	Notification of Change of Ownership of Leased Premises—Effective April 25, 2006, notifying Synopsys, Inc. of the change of ownership under multiple leases	10-K	000-19807	10.20	12/21/07	
10.10	Lease Agreement dated October 14, 2011 between Synopsys, Inc. and 690 E. Middlefield Road Fee, LLC, ("The October 14, 2011 Lease")	10-K	000-19807	10.19	12/16/11	
10.10(i)	Notification of Change of Ownership of Leased Premises under The October 14, 2011 Lease—Effective May 9, 2012					Х
10.11*	1992 Stock Option Plan, as amended and restated	10-K	000-19807	10.29	01/25/02	
10.12*	Employee Stock Purchase Plan, as amended	8-K	000-19807	10.21	04/05/12	
10.13*	Synopsys Amended and Restated Deferred Compensation Plan II	10-Q	000-19807	10.23	3/09/09	
10.14*	1994 Non-Employee Directors Stock Option Plan, as amended and restated	10-Q	000-19807	10.1	09/15/03	
10.15*	1998 Nonstatutory Stock Option Plan	S-8	333-90643	10.1	11/09/99	
10.16	Amended and Restated Credit Agreement, dated February 17, 2012, among Synopsys as Borrower, the several Lenders from time to time parties thereto, Bank of America, N.A. and Wells Fargo Bank, N.A. as Co-Syndication Agents, HSBC Bank USA, N.A. and Union Bank, N.A. as Co-Documentation Agents, JPMorgan Chase Bank, N.A., as Administrative Agent, and J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC, as Co-Lead Arrangers and Co-Bookrunners Form of Stock Option Agreement under	8-K	000-19807	10.45	02/22/12	
10.18*	1992 Stock Option Plan Non-Employee Director Compensation	10-K	000-19807	10.27	12/17/10	
10.19*	Arrangements 2005 Non-Employee Director Equity	8-K	000-19807	10.30	03/31/10	
10.20*	Incentive Plan, as amended Synopsys, Inc. 2005 Assumed Stock Option	8-K	000-19807	10.34	09/12/05	
10.21*	Plan Form of Amended and Restated Executive	10-K	000-19807	10.32	12/22/08	
10.21	Change of Control Severance Benefit Plan Form of Restricted Stock Grant Notice and	10-K	000-19807	10.32	12/16/11	
10.22	Award Agreement under 2005 Non- Employee Directors Equity Incentive Plan	IU-K	000-19007	10.33	12/10/11	

Exhibit			Incorporated	By Refere	nce	Filed or Furnished
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
10.23*	Form of Stock Options Grant Notice and Option Agreement under 2005 Non-	10-K	000-19807	10.34	12/16/11	
10.24*	Employee Directors Equity Incentive Plan 2006 Employee Equity Incentive Plan, as amended	8-K	000-19807	10.35	04/05/12	
10.25*	Form of Restricted Stock Unit Grant Notice and Award Agreement under 2006 Employee Equity Incentive Plan	10-Q	000-19807	10.37	09/02/11	
10.26*	Form of Notice of Grant of Stock Options and Option Agreement under 2006 Employee Equity Incentive Plan	10-Q	000-19807	10.34	09/02/11	
10.27*	Executive Incentive Plan 162(m)	8-K	000-19807	10.42	01/28/10	
10.28*	Amended and Restated Employment Agreement, dated June 2, 2008, between Synopsys, Inc. and Dr. Aart de Geus	8-K	000-19807	10.50	06/03/08	
10.29*	Amended and Restated Employment Agreement, dated June 2, 2008, between	0.17	000 40007	10.51	00/00/00	
40.20*	Synopsys, Inc. and Dr. Chi-Foon Chan	8-K	000-19807	10.51	06/03/08	
10.30* 21.1	Compensation Recovery Policy Subsidiaries of Synopsys, Inc.	10-K	000-19807	10.46	12/22/08	X
23.1	Consent of KPMG LLP, Independent					^
20.1	Registered Public Accounting Firm					Χ
24.1	Power of Attorney (see signature page to					Λ
	this Annual Report on Form 10-K)					Χ
31.1	Certification of Co-Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-					
31.2	14(a) of the Exchange Act Certification of Co-Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-					Х
	14(a) of the Exchange Act					Χ
31.3	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-					
32.1	14(a) of the Exchange Act Certification of Co-Chief Executive Officers and Chief Financial Officer furnished pursuant to Rule 13a-14(b) or Rule 15d- 14(b) of the Exchange Act and					X
	Section 1350 of Chapter 63 of Title 18 of					
	the United States Code					Χ
101.INS	XBRL Instance Document					Χ
101.SCH	XBRL Taxonomy Extension Schema					.,
101 01	Document					Χ
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase					X
101.PRE	Document XBRL Taxonomy Extension Presentation Linkbase Document					X

<sup>\*</sup> Indicates a management contract, compensatory plan or arrangement.

## **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.

SYNOPSYS, INC.

Date: December 20, 2012 By: /s/ Brian M. Beattie

Brian M. Beattie Chief Financial Officer (Principal Financial Officer)

#### **POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Aart J. de Geus, Chi-Foon Chan and Brian M. Beattie, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and reconstitution, 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 Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their 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	Co-Chief Executive Officer (Co-Principal Executive Officer) and Chairman of the Board of Directors	December 20, 2012
/s/ CHI-FOON CHAN Chi-Foon Chan	Co-Chief Executive Officer (Co-Principal Executive Officer), President and Director	December 20, 2012
/s/ Brian M. Beattie	Chief Financial Officer (Principal Financial Officer)	December 20, 2012
Brian M. Beattie	,	
/s/ Esfandiar Naddaf Esfandiar Naddaf	<ul> <li>Vice President, Corporate Controller</li> <li>(Principal Accounting Officer)</li> </ul>	December 20, 2012
/s/ ALFRED J. CASTINO Alfred J. Castino	_ Director	December 20, 2012
/s/ BRUCE R. CHIZEN Bruce R. Chizen	_ Director	December 20, 2012
/s/ Deborah A. Coleman Deborah A. Coleman	_ Director	December 20, 2012
/s/ Chrysostomos L. Nikias Chrysostomos L. Nikias	_ Director	December 20, 2012
/s/ JOHN G. SCHWARZ John G. Schwarz	_ Director	December 20, 2012
/s/ Roy Vallee Roy Vallee	Director	December 20, 2012
/s/ STEVEN C. WALSKE Steven C. Walske	_ Director	December 20, 2012

## **EXHIBIT INDEX**

Fubibit			Incorpor	ated By Re	eference	Filed or
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Furnished Herewith
2.1	Agreement and Plan of Merger among Synopsys, Inc., Magma Design Automation, Inc. and Lotus Acquisition Corp. dated November 30, 2011	8-K	000-19807	2.1	12/01/11	
3.1	Amended and Restated Certificate of Incorporation	10-Q	000-19807	3.1	09/15/03	
3.2	Amended and Restated Bylaws	8-K	000-19807	3.2	05/23/12	
4.1	Specimen Common Stock Certificate	S-1	33-45138	4.3	02/24/92 (effective date)	
10.1	Form of Indemnification Agreement for directors and executive officers	8-K	000-19807	99.2	07/14/11	
10.2	Director's and Officer's Insurance and Company Reimbursement Policy	S-1	33-45138	10.2	02/24/92 (effective date)	
10.3	Lease Agreement, dated August 17, 1990, between Synopsys, Inc. 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, ("The August 17, 1990 Lease")	S-1	33-45138	10.6	02/24/92 (effective date)	
10.3(i)	August 17, 1990 Lease ) Amendment No. 1 to The August 17, 1990 Lease	10-K	000-19807	10.13	12/21/07	
10.3(ii)	Amendment No. 2 to The August 17, 1990 Lease					Χ
10.3(iii)	Amendment No. 3 to The August 17, 1990 Lease	10-K	000-19807	10.12	12/21/07	
10.3(iv)	Amendment No. 4 to The August 17, 1990 Lease					Х
10.3(v)	Amendment No. 5 to The August 17, 1990 Lease	10-K	000-19807	10.11	12/21/07	
10.3(vi)	Amendment No. 6 to The August 17, 1990 Lease	10-K	000-19807	10.10	12/21/07	
10.4*	Deferred Compensation Plan as restated effective August 1, 2002	10-Q	000-19807	10.5	06/10/04	
10.5	Lease Agreement, dated June 16, 1992, between Synopsys, Inc. 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, ("The	10-K	000-19807	10.15	Fiscal year ended September 30, 1992	
10.5(i)	June 16, 1992 Lease") Amendment No. 1 to The June 16, 1992 Lease					Х

Exhibit			Incorpor	ated By Re	ference	Filed or Furnished
Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Herewith
0.5(ii)	Amendment No. 2 to The June 16, 1992 Lease					Х
0.5(iii)	Amendment No. 3 to The June 16, 1992 Lease	10-K	000-19807	10.15	12/21/07	
0.5(iv)	Amendment No. 4 to The June 16, 1992 Lease	10-K	000-19807	10.14	12/21/07	
0.6	Lease Agreement, dated June 23, 1993, between Synopsys, Inc. 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, ("The June 23, 1993 Lease")	10-K	000-19807	10.16	Fiscal year ended September 30, 1993	
0.6(i)	Amendment No. 1 to The June 23, 1993 Lease					Х
0.6(ii)	Amendment No. 2 to The June 23, 1993 Lease	10-K	000-19807	10.17	12/21/07	
0.6(iii)	Amendment No. 3 to The June 23, 1993 Lease	10-K	000-19807	10.16	12/21/07	
0.7	Lease Agreement, dated August 24, 1995, between Synopsys, Inc. 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, ("The August 24, 1995 Lease")	10-K	000-19807	10.21	Fiscal year ended September 30, 1995	
0.7(i)	Amendment No. 1 to The August 24, 1995 Lease	10-K	000-19807	10.18	12/21/07	
0.8	Lease Agreement, dated January 2, 1996 between Synopsys, Inc. and Tarigo-Paul, a California Limited Partnership, ("The January 2, 1996 Lease")	10-Q	000-19807	10.28	05/14/96	
0.8(i)	First Amendment to The January 2, 1996 Lease	8-K	000-19807	10.42	09/12/06	
).8(ii)	Second Amendment to The January 2, 1996 Lease	8-K	000-19807	10.41	09/12/06	
0.8(iii)	Third Amendment to The January 2, 1996 Lease					Х
0.8(iv)	Fourth Amendment to The January 2, 1996 Lease					Х
).8(v)	Notification of Change of Ownership of Leased Premises under The January 2, 1996 Lease—Effective September 25, 2012					Х
).9	Notification of Change of Ownership of Leased Premises—Effective April 25, 2006, notifying Synopsys, Inc. of the change of ownership under multiple leases	10-K	000-19807	10.20	12/21/07	

			Incorporated	I Bv Refere	nce	_Filed or
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Furnished Herewith
10.10	Lease Agreement dated October 14, 2011 between Synopsys, Inc. and 690 E. Middlefield Road Fee, LLC, ("The October 14, 2011 Lease")	10-K	000-19807	10.19	12/16/11	
10.10(i)	Notification of Change of Ownership of Leased Premises under The October 14, 2011 Lease—Effective May 9, 2012					Х
10.11*	1992 Stock Option Plan, as amended and restated	10-K	000-19807	10.29	01/25/02	
10.12*	Employee Stock Purchase Plan, as amended	8-K	000-19807	10.21	04/05/12	
10.13*	Synopsys Amended and Restated Deferred Compensation Plan II	10-Q	000-19807	10.23	3/09/09	
10.14*	1994 Non-Employee Directors Stock Option Plan, as amended and restated	10-Q	000-19807	10.1	09/15/03	
10.15*	1998 Nonstatutory Stock Option Plan	S-8	333-90643	10.1	11/09/99	
10.16	Amended and Restated Credit Agreement, dated February 17, 2012, among Synopsys as Borrower, the several Lenders from time to time parties thereto, Bank of America, N.A. and Wells Fargo Bank, N.A. as Co-Syndication Agents, HSBC Bank USA, N.A. and Union Bank, N.A. as Co-Documentation Agents, JPMorgan Chase Bank, N.A., as Administrative Agent, and J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC, as Co-Lead Arrangers and Co-Bookrunners	8-K	000-19807	10.45	02/22/12	
10.17*	Form of Stock Option Agreement under 1992 Stock Option Plan	10-K	000-19807	10.27	01/12/05	
10.18*	Non-Employee Director Compensation Arrangements	10-K	000-19807	10.27	12/17/10	
10.19*	2005 Non-Employee Director Equity Incentive Plan, as amended	8-K	000-19807	10.30	03/31/10	
10.20*	Synopsys, Inc. 2005 Assumed Stock Option Plan	8-K	000-19807	10.34	09/12/05	
10.21*	Form of Amended and Restated Executive Change of Control Severance Benefit Plan	10-K	000-19807	10.32	12/22/08	
10.22*	Form of Restricted Stock Grant Notice and Award Agreement under 2005 Non- Employee Directors Equity Incentive Plan	10-K	000-19807	10.33	12/16/11	
10.23*	Form of Stock Options Grant Notice and Option Agreement under 2005 Non-	10-K	000-19807	10.34	12/16/11	
10.24*	Employee Directors Equity Incentive Plan 2006 Employee Equity Incentive Plan, as amended	8-K	000-19807	10.35	04/05/12	
10.25*	Form of Restricted Stock Unit Grant Notice and Award Agreement under 2006 Employee Equity Incentive Plan	10-Q	000-19807	10.37	09/02/11	
10.26*	Form of Notice of Grant of Stock Options and Option Agreement under 2006 Employee Equity Incentive Plan	10-Q	000-19807	10.34	09/02/11	
10.27*	Executive Incentive Plan 162(m)	8-K	000-19807	10.42	01/28/10	

Exhibit			Incorporated	l By Refere	nce	Filed or Furnished
Number	<b>Exhibit Description</b>	Form	File No.	Exhibit	Filing Date	Herewith
10.28*	Amended and Restated Employment Agreement, dated June 2, 2008, between Synopsys, Inc. and Dr. Aart de Geus	8-K	000-19807	10.50	06/03/08	
10.29*	Amended and Restated Employment Agreement, dated June 2, 2008, between Synopsys, Inc. and Dr. Chi-Foon Chan	8-K	000-19807	10.51	06/03/08	
10.30*	Compensation Recovery Policy	10-K	000-19807	10.46	12/22/08	
21.1	Subsidiaries of Synopsys, Inc.					Χ
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm					Х
24.1	Power of Attorney (see signature page to this Annual Report on Form 10-K)					Χ
31.1	Certification of Co-Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act					Х
31.2	Certification of Co-Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act					Χ
31.3	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act					Х
32.1	Certification of Co-Chief Executive Officers 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					Х
101.INS	XBRL Instance Document					Χ
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition					
101.LAB	Linkbase Document  XBRL Taxonomy Extension Label Linkbase					Х
101.PRE	Document XBRL Taxonomy Extension Presentation					X
IUI.PRE	Linkbase Document					Х

<sup>\*</sup> Indicates a management contract, compensatory plan or arrangement.

#### AMENDMENT NO. 2 TO LEASE

THIS AMENDMENT NO. 2 is made and entered into this 22nd day of March, 1993, by and between JOHN ARRILLAGA, Trustee, or his Successor Trustee UTA dated 7/20/77 (JOHN ARRILLAGA SEPARATE PROPERTY TRUST) as amended, and RICHARD T. PEERY, Trustee, or his Successor Trustee UTA dated 7/20/77 (RICHARD T. PEERY SEPARATE PROPERTY TRUST) as amended, collectively as LANDLORD, and SYNOPSYS, INC., a Delaware corporation, as TENANT.

#### **RECITALS**

- A. WHEREAS, by Lease Agreement dated August 17, 1990 Landlord leased to Tenant all of that certain 104,170+ square foot building located at 700C East Middlefield Rd., Mountain View, California, the details of which are more particularly set forth in said August 17, 1990 Lease Agreement (the "Lease"), and
- B. WHEREAS, said Lease was amended by the Commencement Letter dated April 1, 1991 which amended the commencement date of the Lease to commence March 15, 1991 and terminate March 14, 1999, and
- C. WHEREAS, said Lease was amended by Amendment No. 1 dated June 16, 1992 to extend the Lease term and amend Paragraphs 31 and 51, Exhibit A and the Basic Rent schedule, and
- D. WHEREAS, it is now the desire of the parties hereto to amend the Lease by extending the Term of the Lease for a two month period commencing November 1, 2000 and terminating December 31, 2000 and amending the Basic Rent schedule, pursuant to the provisions of Paragraph 2 of Amendment No. 1, as hereinafter set forth.

#### **AGREEMENT**

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the hereinafter mutual promises, the parties hereto do agree as follows:

- 1. <u>TERM OF LEASE</u>: Pursuant to Paragraph 2 of Amendment No. 1 dated June 16, 1992, it was agreed between the parties that the term of this Lease and the term of Lease Agreement dated June 16, 1992 for Premises leased at 700B E. Middlefield Rd. be coterminous, therefore the term of this Lease shall be extended for an additional two month period, from November 1, 2000 to December 31, 2000. It is agreed and understood that the term of this Lease may be further extended and amended once the commencement date on the second floor of the Premises leased under the June 16, 1992 Lease is determined.
  - 2. <u>BASIC RENT SCHEDULE</u>: The monthly Basic Rental shall be adjusted as follows:

On November 1, 2000 the sum of ONE HUNDRED EIGHTY TWO THOUSAND TWO HUNDRED NINETY SEVEN AND 50/100 DOLLARS (\$182,297.50) shall be due, and a like sum due on the first day of each month thereafter through and including December 1, 2000.

The aggregate rental for the Lease shall be increased by \$364,595.00 or from \$20,060,245.22 to \$20,424,840.22.

EXCEPT AS MODIFIED HEREIN, all other terms, covenants, and conditions of the Lease shall remain in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment No. 2 to Lease as of the day and year first hereinabove set forth.

LANDLORD:	TENANT:
JOHN ARRILLAGA SEPARATE PROPERTY TRUST	SYNOPSYS, INC. a Delaware corporation
By /s/ John Arrillaga John Arrillaga, Trustee	By /s/ A. Brooke Seawell
John Milliaga, Trasec	A. Brooke Seawell
	Print or Type Name
RICHARD T. PEERY SEPARATE PROPERTY TRUST	Title: V.P Finance & Operations
By /s/ Richard T. Peery Richard T. Peery Trustee	Dated:

#### AMENDMENT NO. 4 TO LEASE

THIS AMENDMENT NO. 4 is made and entered into this fourth day of November, 1994, by and between JOHN ARRILLAGA, Trustee, or his Successor Trustee UTA dated 7/20/77 (JOHN ARRILLAGA SEPARATE PROPERTY TRUST) as amended, and RICHARD T. PEERY, Trustee, or his Successor Trustee UTA dated 7/20/77 (RICHARD T. PEERY SEPARATE PROPERTY TRUST) as amended, collectively as LANDLORD, and SYNOPSYS, INC., a Delaware corporation, as TENANT.

#### RECITALS

- A. WHEREAS, by Lease Agreement dated August 17, 1990 Landlord leased to Tenant all of that certain 104,170+ square foot building located at 700C East Middlefield Rd., Mountain View, California, the details of which are more particularly set forth in said August 17, 1990 Lease Agreement (the "Lease"), and
- B. WHEREAS, said Lease was amended by the Commencement Letter dated April 1, 1991 which amended the commencement date of the Lease to commence March 15, 1991 and terminate March 14, 1999, and
- C. WHEREAS, said Lease was amended by Amendment No. 1 dated June 16, 1992 to extend the Lease term and amend Paragraphs 31 and 51, Exhibit A and the Basic Rent schedule, and
- D. WHEREAS, said Lease was amended by Amendment No. 2 dated March 22, 1993 to extend the Lease Term and amend the Basic Rent Schedule, and
- E. WHEREAS, said Lease was amended by Amendment No. 3 dated June 23, 1993, which: (i) extended the Term of the Lease to be co-terminous with the projected term of the Lease Agreement dated June 23, 1993 for premises located at 700A Middlefield Road, Mountain View, California; (ii) amended the Basic Rent schedule; and (iii) replaced Paragraph 47, "Parking", and
- F. WHEREAS, it is now the desire of the parties hereto to amend the Lease by: (i) extending the Term of the Lease for an additional two (2) months to be co-terminous with the extended Termination Date of the Lease Agreement dated June 23, 1993 for premises located at 700A Middlefield Road, Mountain View, California, and (ii) amending the Basic Rent schedule and the Aggregate Rent of the Lease Agreement accordingly, as hereinafter set forth.

## **AGREEMENT**

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the hereinafter mutual promises, the parties hereto do agree as follows:

1. <u>TERM OF LEASE</u>: Pursuant to Paragraph 3 of Amendment No. 3 dated June 23, 1993, "Future Amendment to Lease Term and Basic Rent Schedule", it is agreed between the parties that the term of this Lease shall be extended for an additional two month period, and the Termination Date shall change from December 31, 2002 to February 28, 2003.

2. BASIC RENT SCHEDULE: The monthly Basic Rental shall be adjusted as follows:

On January 1, 2003 the sum of ONE HUNDRED EIGHTY SEVEN THOUSAND FIVE HUNDRED SIX AND NO/100 DOLLARS (\$187,506.00) shall be due, and a like sum due on the first day of each month thereafter through and including February 1, 2003.

3. <u>AGGREGATE RENT</u>: It is hereby acknowledged that, due to a mathematical error in calculating the Aggregate Rent due under the Lease, the Aggregate Rent as indicated in the Lease Amendment No. 3 is incorrectly stated. The correct Aggregate Rent due under the Lease prior to the current extension under this Amendment No. 4 is \$24,924,984.22.

Due to the extension stated herein, the Aggregate Rental shall be increased by \$375,012.00, or from \$24,924,984.22 to \$25,299,996.22.

EXCEPT AS MODIFIED HEREIN, all other terms, covenants, and conditions of the Lease shall remain in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment No. 4 to Lease as of the day and year first hereinabove set forth.

LANDLORD:	TENANT:
JOHN ARRILLAGA SEPARATE PROPERTY TRUST	SYNOPSYS, INC. a Delaware corporation
By /s/ John Arrillaga John Arrillaga, Trustee	By /s/ A. Brooke Seawell
	A. Brooke Seawell Print or Type Name
RICHARD T. PEERY SEPARATE PROPERTY TRUST	Title: SR. V.P Finance & Operations
	Dated: 11/18/94
By /s/ Richard T. Peery Richard T. Peery Trustee	

#### AMENDMENT NO. 1 TO LEASE

THIS AMENDMENT NO. 1 is made and entered into this 23rd day of June, 1993, by and between JOHN ARRILLAGA, Trustee, or his Successor Trustee UTA dated 7/20/77 (JOHN ARRILLAGA SEPARATE PROPERTY TRUST) as amended, and RICHARD T. PEERY, Trustee, or his Successor Trustee UTA dated 7/20/77 (RICHARD T. PEERY SEPARATE PROPERTY TRUST) as amended, collectively as LANDLORD, and SYNOPSYS, INC., a Delaware corporation, as TENANT.

#### **RECITALS**

- A. WHEREAS, by Lease Agreement dated June 16, 1992, Landlord leased to Tenant all of that certain 104,170+ square foot building located at 700B East Middlefield Rd., Mountain View, California, the details of which are more particularly set forth in said June 16, 1992 Lease Agreement (the "Lease"), and
- B. WHEREAS, said Lease was amended by the Commencement Letter dated March 9, 1993 which amended the commencement date of the Lease to commence December 21, 1992 and terminate December 31, 2000, and
- C. WHEREAS, it is now the desire of the parties hereto to amend the Lease by: (i) establishing the commencement date for the second floor space; (ii) extending the Term of the Lease to be co-terminous with the term of the Lease Agreement dated June 23, 1993 for premises located at 700A Middlefield Road, Mountain View, California, which extension is projected to be two years; (iii) amending the Basic Rent schedule; (iv) replacing Paragraph 46 Parking; and (v) establishing the commencement date for the payment of Additional Rent expenses for 100% of the building, as hereinafter set forth.

#### **AGREEMENT**

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the hereinafter mutual promises, the parties hereto do agree as follows:

1. <u>COMMENCEMENT DATE FOR SECOND FLOOR SPACE</u>: It is agreed that the Lease on the second floor of the Leased Premises shall commence effective December 21, 1993.

Due to the change in commencement date the Basic Rent Schedule shall be changed as indicated in Paragraph 5 below.

- 2. <u>TERM OF LEASE</u>: Subject to Paragraph 3 below, it is agreed between the parties that the term of this Lease shall be extended for an additional two year period, from January 1, 2001 to December 31, 2002.
- 3. <u>LEASE TERMS CO-TERMINOUS</u>: It is acknowledged that (i) concurrently with the execution of this Amendment No. 1, Landlord and Tenant are also executing a lease dated June 23, 1993 affecting adjacent property located at 700A Middlefield Road, Mountain View, California, and (ii) it is the intention of the parties that the term of said Lease Agreement dated June 16, 1992 be coterminous with the term of Lease Agreement dated June 23, 1993, such that the terms of Lease Agreement dated June 23, 1993 and Lease Agreement dated June 16, 1992 expire on the same date. Therefore, not withstanding anything to the contrary in said Lease, it is acknowledged that the implementation of this Paragraph shall result in an extension of the term of Lease Agreement dated June 16, 1992, in which event Tenant's monthly Basic Rent shall increase by at the rate of \$.05 per square foot on January 1, 2001 and shall remain at that rate thereafter

including any extensions of the Lease terms as provided for in Paragraph 4 herein. As soon as the commencement date of Lease Agreement dated June 23, 1993 has been determined following completion of improvements and satisfaction of other appropriate conditions, the parties shall execute, if necessary, an amendment to Lease Agreement dated June 16, 1992 establishing the applicable termination date of said Lease in accordance with the foregoing provisions of this paragraph.

4. FUTURE AMENDMENT TO LEASE TERM AND BASIC RENT SCHEDULE: It is agreed and understood that the term of this Lease may be amended, or further extended and the Basic Rent Schedule amended: (i) once the commencement date on the second floor of the premises leased under the June 23, 1993 lease is determined, said Lease term shall be extended for a period of eight years from said second floor lease commencement date which schedule commencement date in no event will be more than six months following the commencement date of the first floor lease, plus any extension in term related to deferral of occupancy of either the first or second floor of the June 23, 1993 lease as described in Paragraph 50 of the June 23, 1993 lease; or (ii) if Tenant exercises its option to defer occupancy on the first and/or second floor of the June 23, 1993 lease as defined in Paragraph 50 of said June 23, 1993 lease. In the event occupancy of either the first or second floor of the June 23, 1993 lease is deferred by Tenant (as allowed under the June 23, 1993 lease), any such deferment shall result in the term of this Lease being extended by one-third of the total period deferred so that the termination date of this Lease coincides with the termination date of the June 23, 1993 lease. During any such extended period the monthly Basic Rent per square foot rate on this Lease will remain at the same rate existing prior to the commencement of the extended term. For example: If the June 23, 1993 lease commences on July 1, 1994, and Tenant defers occupancy of the second floor until July 1, 1995 the term on the June 23, 1993 lease and on this Lease would be extended for eight years and two months from July 1, 1995; and if Tenant elects to defer its occupancy of the first floor of said June 23, 1993 lease for three months from July 1, 1994 and defer the lease commencement on the second floor for six months, the lease term on the June 23, 1993 lease and on this Lease would be extended for a total period of eight years and three months (one month extension for the three month deferral on the first floor lease commencement, and two months extension on the six month deferral on the second floor extension).

5. <u>BASIC RENT SCHEDULE</u>: The monthly Basic Rental shall be adjusted as follows:

On December 1, 1993 the sum of ONE HUNDRED SEVEN THOUSAND EIGHT HUNDRED EIGHTY AND 16/100 DOLLARS (\$107,880.16) shall be due representing the period December 1 through December 31, 1993.

On January 1, 1994 the sum of ONE HUNDRED FIFTY SIX THOUSAND TWO HUNDRED FIFTY FIVE AND NO/100 DOLLARS (\$156,255.00) shall be due, and a like sum due on the first day of each month thereafter through and including December 1, 1997.

On January 1, 1998 the sum of ONE HUNDRED SIXTY SIX THOUSAND SIX HUNDRED SEVENTY TWO AND NO/100 DOLLARS (\$166,672.00) shall be due, and a like sum due on the first day of each month thereafter through and including December 1, 2000.

On January 1, 2001 the sum of ONE HUNDRED SEVENTY ONE THOUSAND EIGHT HUNDRED EIGHTY AND 50/100 DOLLARS (\$171,880.50) shall be due, and a like sum due on the first day of each month thereafter through and including December 1, 2002.

The aggregate rental for the Lease shall be increased by \$4,154,884.66 or from \$14,466,216.33 to \$18, 621,100.99.

6. <u>PARKING</u>: It is hereby agreed between the parties that the existing Paragraph 46 <u>Parking</u> of the aforementioned Lease Agreement shall be considered null and void and shall be replaced with the following:

"Tenant shall have the right to the nonexclusive use of approximately one-third of the parking spaces in the common parking area of the complex. Tenant agrees that Tenant, Tenant's employees, agents, representatives, and/or invitees shall not use parking spaces in excess of said one-third parking spaces allocated to Tenant hereunder. Landlord shall have the right, at Landlord's sole discretion, to specifically designate the location of Tenant's parking spaces within the common parking area of the complex in the event of a dispute among the tenants occupying the buildings in the complex referred to herein, in which event Tenant agrees that Tenant, Tenant's employees, agents, representatives and/or invitees shall not use any parking spaces other than those parking spaces specifically designated by Landlord for Tenant's use. Said parking spaces, if specifically designated by Landlord to Tenant, may be relocated by Landlord at any time, and from time to time. Landlord reserves the right, at Landlord's sole discretion, to rescind any specific designation of parking spaces, thereby returning Tenant's parking spaces to the common parking area. Landlord shall give Tenant written notice of any change in Tenant's parking spaces. Tenant shall not, at any time, park, or permit to be parked, any trucks or vehicles adjacent to the loading area so as to interfere in any way with the use of such areas, nor shall Tenant, at any time, park or permit the parking of Tenant's trucks and other vehicles or the trucks and vehicles of Tenant's suppliers or others, in any portion of the common areas not designated by Landlord for such use by Tenant. Tenant shall not park nor permit to be parked, any inoperative vehicles or equipment on any portion of the common parking area or other common areas of the complex. Tenant agrees to assume responsibility for compliance by its employees with the parking provision contained herein. If Tenant or its employees park in other than designated parking areas, then Landlord may charge Tenant, as an additional charge, and Tenant agrees to pay Ten Dollars (\$10.00) per day for each day or partial day each such vehicle is parking in any area other than that designated. Tenant hereby authorizes Landlord, at Tenant's sole expense, to tow away from the complex any vehicle belonging to Tenant or Tenant's employees parked in violation of these provisions, provided that 24 hours prior to the towing of any such vehicle, Landlord or Landlord's agent has attached a violation sticker or notice to such vehicle(s). Tenant shall use the parking area for vehicle parking only and shall not use the parking areas for storage.

7. <u>COMMENCEMENT DATE FOR ADDITIONAL EXPENSES FOR 100% OF THE BUILDING</u>: Not withstanding anything to the contrary in said Lease, it is agreed that on June 1, 1993, which is prior to the commencement date of the Lease for the second floor space, Tenant shall pay to Landlord or Landlord's designated agent in addition to the Basic Rent, Additional Expenses on 100% of the 104,170 square foot building and Leased Premises as outlined in Paragraph 4D of the Lease Agreement.

EXCEPT AS MODIFIED HEREIN, all other terms, covenants, and conditions of the Lease shall remain in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment No. 1 to Lease as of the day and year first hereinabove set forth.

LANDLORD:	TENANT:	
JOHN ARRILLAGA SEPARATE PROPERTY TRUST	SYNOPSYS, INC. a Delaware corporation	
By /s/ John Arrillaga John Arrillaga, Trustee	By <u>/s/ Harvey C. Jones Jr.</u>	
	Harvey C. Jones Jr. Print or Type Name	
RICHARD T. PEERY SEPARATE PROPERTY TRUST	Title: Chairman & CEO	
By /s/ Richard T. Peery Richard T. Peery, Trustee	Dated: 7/2/93	

## AMENDMENT NO. 2 TO LEASE

THIS AMENDMENT NO. 2 is made and entered into this fourth day of November, 1994, by and between JOHN ARRILLAGA, Trustee, or his Successor Trustee UTA dated 7/20/77 (JOHN ARRILLAGA SEPARATE PROPERTY TRUST) as amended, and RICHARD T. PEERY, Trustee, or his Successor Trustee UTA dated 7/20/77 (RICHARD T. PEERY SEPARATE PROPERTY TRUST) as amended, collectively as LANDLORD, and SYNOPSYS, INC., a Delaware corporation, as TENANT.

#### RECITALS

- A. WHEREAS, by Lease Agreement dated June 16, 1992, Landlord leased to Tenant all of that certain 104,170+ square foot building located at 700B East Middlefield Rd., Mountain View, California, the details of which are more particularly set forth in said June 16, 1992 Lease Agreement (the "Lease"), and
- B. WHEREAS, said Lease was amended by the Commencement Letter dated March 9, 1993 which amended the commencement date of the Lease to commence December 21, 1992 and terminate December 31, 2000, and
- C. WHEREAS, said Lease was amended by Amendment No. 1 dated June 23, 1993 which: (i) established the Commencement Date for the second floor space; (ii) extended the Term of the Lease to be co-terminous with the projected term of the Lease Agreement dated June 23, 1993 for premises located at 700A Middlefield Road, Mountain View, California; (iii) amended the Basic Rent schedule; (iv) replaced Paragraph 46 <a href="Parking">Parking</a>; and (v) established the Commencement Date for the payment of Additional Rent expenses for 100% of the building, and
- D. WHEREAS, it is now the desire of the parties hereto to amend the Lease by: (i) extending the Term of the Lease for an additional two (2) months to be co-terminous with the extended Termination Date of the Lease Agreement dated June 23, 1993 for premises located at 700A Middlefield Road, Mountain View, California, and (ii) amending the Basic Rent schedule and the Aggregate Rent of the Lease accordingly, as hereinafter set forth.

## AGREEMENT

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the hereinafter mutual promises, the parties hereto do agree as follows:

- 1. <u>TERM OF LEASE</u>: Pursuant to Paragraph 4 of Amendment No. 1 dated June 23, 1993, "Future Amendment to Lease Term and Basic Rent Schedule", it is agreed between the parties that the term of this Lease shall be extended for an additional two month period, and the Termination Date shall be changed from December 31, 2002 to February 28, 2003.
- 2. <u>BASIC RENTAL FOR EXTENDED TERM OF LEASE</u>: The monthly Basic Rental for the Extended Term of Lease shall be as follows:

On January 1, 2003, the sum of ONE HUNDRED SEVENTY ONE THOUSAND EIGHT HUNDRED EIGHTY AND 50/100 DOLLARS (\$171,880.50) shall be due, and a like sum due on the first day of each month thereafter, through and including February 1, 2003.

The Aggregate Rental for the Lease shall be increased by \$343,761.00 or from \$18,621,100.99 to \$18,964,861.99.

EXCEPT AS MODIFIED HEREIN, all other terms, covenants, and conditions of the Lease shall remain in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment No. 2 to Lease as of the day and year first hereinabove set forth.

LANDLORD:	TENANT:
JOHN ARRILLAGA SEPARATE PROPERTY TRUST	SYNOPSYS, INC. a Delaware corporation
By /s/ John Arrillaga John Arrillaga, Trustee	By /s/ A. Brooke Seawell
	A. Brooke Seawell Print or Type Name
RICHARD T. PEERY SEPARATE PROPERTY TRUST	Title: SR. V.P Finance & Operations
By /s/ Richard T. Peery Richard T. Peery, Trustee	Dated: 11/18/94

## AMENDMENT NO. 1 TO LEASE

THIS AMENDMENT NO. 1 is made and entered into this fourth day of November, 1994, by and between JOHN ARRILLAGA, Trustee, or his Successor Trustee UTA dated 7/20/77 (JOHN ARRILLAGA SEPARATE PROPERTY TRUST) as amended, and RICHARD T. PEERY, Trustee, or his Successor Trustee UTA dated 7/20/77 (RICHARD T. PEERY SEPARATE PROPERTY TRUST) as amended, collectively as LANDLORD, and SYNOPSYS, INC., a Delaware corporation, as TENANT.

#### RECITALS

- A. WHEREAS, by Lease Agreement dated June 23, 1993 Landlord leased to Tenant all of that certain 104,170+ square foot building located at 700A East Middlefield Road, Mountain View, California, the details of which are more particularly set forth in said June 23, 1993 Lease Agreement, and
- B. WHEREAS, it is now the desire of the parties hereto to amend the Lease by (i) acknowledging Tenant's exercise of its option to delay occupancy of the first floor of the Premises and establishing the Commencement Date for the second floor of the Premises, (ii) adjusting the Term of the Lease in accordance with the terms of Paragraph 51 of the Lease, and (iii) amending the Basic Rent schedule and the Aggregate Rent of said Lease Agreement accordingly as hereinafter set forth.

#### **AGREEMENT**

NOW THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the hereinafter mutual promises, the parties hereto do agree as follows:

- 1. <u>COMMENCEMENT DATE OF LEASE</u>: Tenant has: (i) exercised its option to delay occupancy of the first floor of the Premises for a three (3) month period as allowed under Lease Paragraph 51, "Commencement Date, Lease Term and Basic Rent Schedule Amended in the Event Tenant Delays Occupancy on the First and/or Second Floor of the Premises" and (ii) hereby waived its option to delay occupancy of the second floor. Therefore, the Commencement Date for the first floor of the Premises shall be changed from July 1, 1994 to October 1, 1994 and the Commencement Date for the second floor of the Premises shall be February 1, 1995.
- 2. <u>TERM OF LEASE</u>: Pursuant to Paragraph 51 of the Lease, "Commencement Date, Lease Term and Basic Rent Schedule Amended in the Event Tenant Delays Occupancy on the First and/or Second Floor of the Premises", the Termination Date of the Lease is to be eight years from the Commencement Date of the second floor of the Premises (February 1, 1995), plus a period of one month resulting from Tenant delaying its occupancy of the first floor by three months (from the scheduled Commencement Date of July 1, 1994 to October 1, 1994); therefore, the Termination Date of the Lease shall be February 28, 2003, which date is eight years and one month from the Commencement Date for the second floor of the Premises. The total Term of the Lease shall be eight years and five months, from October 1, 1994 through February 28, 2003.
- 3. <u>BASIC RENT SCHEDULE</u>: Due to the deferred Lease Commencement Date, the Basic Rent Schedule shall be changed as indicated herein:

On October 1, 1994, the sum of SEVENTY EIGHT THOUSAND ONE HUNDRED TWENTY SEVEN AND 50/100 DOLLARS (\$78,127.50) shall be due, and a like sum due on the first day of each month thereafter through and including January 1, 1995.

On February 1, 1995, the sum of ONE HUNDRED FIFTY SIX THOUSAND TWO HUNDRED FIFTY FIVE AND NO/100 DOLLARS (\$156,255.00) shall be due, and a like sum due on the first day of each month thereafter, through and including January 1, 1998.

On February 1, 1998, the sum of ONE HUNDRED SIXTY SIX THOUSAND SIX HUNDRED SEVENTY TWO AND NO/100 DOLLARS (\$166,672.00) shall be due, and a like sum due on the first day of each month thereafter, through and including January 1, 2001.

On February 1, 2001, the sum of ONE HUNDRED SEVENTY ONE THOUSAND EIGHT HUNDRED EIGHTY AND 50/100 DOLLARS (\$171,880.50) shall be due, and a like sum due on the first day of each month thereafter, through and including December 1, 2002.

On January 1, 2003, the sum of ONE HUNDRED SEVENTY SEVEN THOUSAND EIGHTY NINE AND NO/100 DOLLARS (\$177,089.00) shall be due, and a like sum due on the first day of each month thereafter, through and including February 1, 2003.

The Aggregate Basic Rent for the Lease shall be increased by \$26,042.50, or from \$16,219,269.00 to \$16,245,311.50.

EXCEPT AS MODIFIED HEREIN, all other terms, covenants, and conditions of said June 23, 1993 Lease Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment No. 1 to Lease as of the day and year first hereinabove set forth.

LANDLORD:	TENANT:
JOHN ARRILLAGA SEPARATE PROPERTY TRUST	SYNOPSYS, INC. a Delaware corporation
By /s/ John Arrillaga John Arrillaga, Trustee	By /s/ A. Brooke Seawell
Date: 11/22/94	A. Brooke Seawell Print or Type Name
RICHARD T. PEERY SEPARATE PROPERTY TRUST	Title: SR V.P Finance & Operations
By /s/ Richard T. Peery Richard T. Peery, Trustee	Date: 11/18/94
Date: 11/23/94	_

#### THIRD AMENDMENT TO LEASE

THIS THIRD AMENDMENT TO LEASE ("Amendment") is executed as of April 8th, 2010, between TARIGO-PAUL, LLC, a California limited liability company ("Lessor") and SYNOPSYS, INC., a Delaware corporation ("Lessee").

## **RECITALS**

- A. Lessor and Lessee entered into a Mary Avenue Industrial Lease dated as of January 2, 1996 (the "Original Lease"), as amended by a First Amendment to Lease dated July 15, 1996 (the "First Amendment") and a Second Amendment to Lease dated August 31, 2006 (the "Second Amendment") (the Original Lease, as amended, is hereinafter referred to as the "Lease"), pursuant to which Lessor leases to Lessee, and Lessee leases from Lessor, certain premises (the "Premises") consisting of two buildings located at 445 and 455 Mary Avenue in Sunnyvale, California. Capitalized terms not otherwise defined herein shall have the meanings given them in the Lease.
- B. Pursuant to the Second Amendment, Lessor shall provide Lessee with a lessee improvement Allowance for Lessee's use in making alterations to the Premises pursuant to all the terms of the Lease. Lessee must make requests for the Allowance prior to the Cut-Off Date, which is defined in the Second Amendment as the earlier date to occur of: (i) the third anniversary of the Extension Date or (ii) the date on which Lessee sends a Termination Notice to Lessor. The third anniversary of the Extension Date is April 26, 2010. The final date on which Lessee could have sent a Termination Notice was April 30, 2009, such right has expired and is of no further force or effect.
- C. Lessor and Lessee presently desire to amend the Lease to (i) clarify the types of improvements for which costs will be covered by the Allowance and (ii) extend the Cut-Off Date before which Lessee must request disbursement of the Allowance.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto agree as follows:

1. <u>Cut-Off Date</u>. The period of time within which Lessee must submit a complete application for disbursement of the Allowance shall expire May 31, 2010. To be eligible for reimbursement, the complete application package must be submitted on or before May 31, 2010 and, as of that date, must consist of: (i) Payment application in the form of an AIA G702, signed by Lessee, (ii) copies of invoices covering all of the alterations for which payment is requested, (iii) a written certification from Lessee's architect stating that the alterations described on such invoices have been completed in accordance with applicable laws and plans therefor that have been approved by Lessor, (iii) duly executed (conditional or final, as the case may be) lien releases from all contractors requesting payment, and (iv) with respect to the final disbursement, proof of the satisfactory completion of all required inspections and the issuance of any required approvals and sign-offs by governmental authorities with respect thereto. Any portion of the Allowance for which a complete application package has not been received on or before May 31, 2010 is forfeit and shall be forever waived by Lessee. Upon Lessee's submission of its application package to Lessor, if Lessor discovers any deficiency in Lessee's application

package, Lessor will use good faith efforts to promptly notify Lessee of any such deficiency in order to allow Lessee to correct such deficiency. As described in the Second Amendment, the Allowance will be payable by Lessor to Lessee within 30 days following Lessee's submission of a complete application package to Lessor.

- 2. <u>Scope of Work</u>. Funds provided pursuant to the Allowance will only be used to perform the scope of work as shown in <u>Exhibit A</u>, attached hereto and made a part hereof.
- 3. <u>Estoppel</u>. Lessee hereby certifies and acknowledges, that as of the date hereof, to the best of Lessee's knowledge, (a) Lessor is not in default in any respect under the Lease, (b) Lessee does not have any defenses to its obligations under the Lease, and (c) there are no offsets against rent payable under the Lease. Lessee acknowledges and agrees that: (i) the representations herein set forth constitute a material consideration to Lessor in entering into this Third Amendment; (ii) such representations are being made by Lessee for purposes of inducing Lessor to enter into this Third Amendment; and (iii) Lessor is relying on such representations in entering into this Third Amendment
- 4. <u>Lease in Full Force and Effect</u>. Except as provided in this Amendment, the Lease is unmodified hereby and remains in full force and effect.

IN WITNESS WHEREOF, the parties have agreed to the terms of this Amendment as of the date first written above.

#### "LESSOR"

TARIGO-PAUL, LLC, a California limited liability company

By: North Parcel Management, Inc., a California corporation, its managing member

By: /s/ Jay Paul

Name: Jay Paul

Its: Pres & Sec.

## "LESSEE"

SYNOPSYS, INC., a Delaware corporation

By: /s/ Janet Sue Collinson

4.8.2010

Name: Janet Sue Collinson

Its: SVP HR & Facilities

## **EXHIBIT A**

## Scope of Work

## **ELECTRICAL & LIGHTING**

connect new 5 ton heat pumps connect new exhaust fan for elevator rooms

## **PLUMBING**

remove & upgrade lavy sinks and faucets for new counters (48) upgrade water heaters (4ea.)

## **HVAC**

Building 1 & 2 Elevator room exhaust upgrade to optimize BIdg 2 Automated logic DDC for new heat pumps Bldg 2 2nd flr lab 22.147 & 22.140 (3EA.) new heat pumps

## **COUNTER TOPS**

remove counter tops & mirrors upgrade solid surface counter tops upgrade mirrors repair tile (allowance)

#### PAINT

repaint bldg 1 interior repaint bldg2 interior

## **CARPET-upgrade primary corridors**

demo and replace carpet tile and rubber base through out demo and replace VCT and rubber base through out building

demo and replace rubber stair treads through out building

#### FOURTH AMENDMENT TO LEASE

THIS FOURTH AMENDMENT TO LEASE (this "Amendment") is executed as of the 2<sup>nd</sup> day of March, 2012, between TARIGO-PAUL, LLC, a California limited liability company ("Lessor") and SYNOPSYS, INC., a Delaware corporation ("Lessee").

## **RECITALS**

A. Tarigo-Paul, a California limited partnership (the predecessor-in-interest to Lessor) and Lessee entered into a Mary Avenue Industrial Lease dated as of January 2, 1996 (the "Original Lease"), as amended by (i) a First Amendment to Lease dated July 15, 1996 (the "First Amendment"), (ii) a Second Amendment to Lease dated August 31, 2006 (the "Second Amendment") and (iii) a Third Amendment to Lease dated April 8, 2010 (the Original Lease, as so as amended, is hereinafter referred to as the "Lease"), pursuant to which Lessor leases to Lessee, and Lessee leases from Lessor, certain premises (the "Premises") consisting of two (2) four (4) story buildings (the "Buildings") located at 445 and 455 Mary Avenue in Sunnyvale, California. Capitalized terms not otherwise defined herein shall have the meanings given them in the Lease. As of the Fourth Amendment Extension Date (as defined below), the "Lease" shall mean the Lease, as modified by this Amendment.

B. Pursuant to the terms of Section 3.2 of the Original Lease and Section 7 of the Second Amendment, Lessee has one (1) right to extend the Term of the Lease for an additional period of five (5) years. Lessee and Lessor have negotiated for Lessee's right to the Fourth Amendment Extended Term (as defined below) in lieu of Lessee's exercise of the foregoing right to extend the Term for such five (5) year period, and the parties now desire to amend the Lease to (i) extend the Term of the Lease as is provided for in Section 3 below, (ii) modify the Base Rent payable by Lessee under the Lease during such Fourth Amendment Extended Term as provided below, (iii) correct the square footage of the Premises stated in the Lease, (iv) provide that Lessee's remaining extension right pursuant to Section 3.2 of the Original Lease has now been used and is no longer in effect, (v) provide Lessee with one (1) option to extend the Term of the Lease for an additional five (5) year period as provided for in Section 5 below, and (vi) modify the Lease in certain other respects, all on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto agree as follows:.

- 1. **Recitals.** Recitals A and B above are incorporated herein by reference.
- 2. <u>Premises</u>. Notwithstanding anything to the contrary contained in the Lease (including, without limitation, Section 1 of the First Amendment), Lessor and Lessee agree that, effective as of the Fourth Amendment Extension Date, the square footage of the Buildings as set forth throughout the Lease (including, without limitation, with respect to the determination of rent during the Fourth Amendment Extended Term and, if applicable, the Option Term under Section 5 below) shall be deemed to be 215,824 square feet, as follows: 445

Mary Avenue contains 107,912 square feet and the Building located at 455 Mary Avenue contains 107,912 square feet.

3. Extension of Term. Provided that Lessor has not then provided Lessee with a written notice of default which has not been cured pursuant to the Lease (hereinafter "Default") and the Lease is then still in full force and effect, as of November 1, 2012 (the "Fourth Amendment Extension Date"), the Term of the Lease shall be extended such that the Term shall terminate on October 31, 2019 (the "Fourth Amendment Expiration Date"). (Such time period from November 1, 2012 to October 31, 2019 is hereafter referred to as the "Fourth Amendment Extended Term").

#### 3. Base Rent.

(a) Base Rent. During the Fourth Amendment Extended Term, the Base Rent payable under the Lease shall be as follows:

Months	Rent Per Square Foot	Square Footage	Monthly Base Rent	Annual Base Rent
01-12*	\$ 2.75	215,824	\$593,516.00	\$7,122,192.00
13-24	\$ 2.833	215,824	\$611,321.48	\$7,335,857.76
25-36	\$ 2.917	215,824	\$629,661.12	\$7,555,933.44
37-48	\$ 3.005	215,824	\$648,550.96	\$7,782,611.52
49-60	\$ 3.095	215,824	\$668,007.49	\$8,016,089.88
61-72	\$ 3.188	215,824	\$688,047.71	\$8,256,572.52
73-84	\$ 3,284	215,824	\$708,689.14	\$8,504,269.68

<sup>\*</sup> Subject to abatement during Months 1 and 2 pursuant to Section 3(b) below.

<sup>(</sup>b) Abatement Period. Notwithstanding anything to the contrary contained herein, so long as Lessee is not then in Default under the Lease, Lessee shall be entitled to receive an abatement of the Base Rent due during the calendar months of November and December, 2012 (the "Abatement Period") subject to the provisions of this Section 3(b). All Base Rent abated pursuant to this Section 3(b) is herein referred to as "Abated Rent." During the Abatement Period, Lessee shall still be responsible for the payment of all of its other monetary obligations under the Lease (including, without limitation, all impositions, insurance premiums, taxes, assessments, operating charges, maintenance charges and other charges, costs and expenses arising or contemplated under the Lease). In the event of a Default by Lessee under the terms of the Lease that results in early termination pursuant to the provisions of Article XII of the Original Lease, and as part of the recovery set forth in Article XII of the Original Lease, Landlord shall be entitled to the recovery of the then-unamortized portion of the Abated Rent

(assuming amortization of Abated Rent on a straight-line basis over the Fourth Amendment Extended Term.).

- 4. <u>Condition of Premises</u>. As of the Fourth Amendment Extension Date, the Premises shall be leased to Lessee on an "as-is" basis, without any representation or warranty whatsoever, and any representations or warranties or covenants made by Lessor in the Lease with respect to the condition of the Premises as of the Commencement Date or any other period during the Term shall not apply to the Fourth Amendment Extension Date or any time period during the Fourth Amendment Extended Term. Without limiting the foregoing, Lessor has not made any agreement to perform any alterations or improvements to the Premises or provide any improvement allowance to Lessee in connection with the Fourth Amendment Extended Term. The foregoing provisions of this Section 4 will not be deemed to diminish or alter Lessor's general maintenance, repair and replacement obligations as set forth in Sections 6.1 (b) and 6.2(b) of the Original Lease.
- 5. Extension Option. Lessee acknowledges and agrees that Lessee no longer possesses any of the rights to extend the Lease Term originally set forth in Section 3.2 of the Original Lease and Section 7 of the Second Amendment. Lessee is hereby given one (1) option to extend the Term (the "Option to Extend") for an additional period of five (5) years (the "Option Term") (i.e., from November 1, 2019 through October 31, 2024), which Option to Extend may be exercised only by written notice (the "Option Notice") from Lessee to Lessor given on or before April 30, 2019 (the "Option Exercise Date"); provided, however, if Lessee is in material Default on the Option Exercise Date, the Option Notice shall be totally ineffective and the Lease shall expire at the end of the Fourth Amendment Extended Term. In the event Lessee exercises the foregoing Option to Extend, the Option Term shall be subject to all of the terms and conditions of the Lease except that Base Rent payable by Lessee during the Option Term shall be equal to ninety-five percent (95%) of the then "Fair Market Rent" (as defined in Section 3.2(b) of the Original Lease), as determined under Section 3.2(c) of the Original Lease, with no "floor" as described in Section 3.2(b) of the Original Lease.
  - 6. Existing Termination Option. Section 3 of the Second Amendment is hereby deleted in its entirety.
- 7. <u>Brokers</u>. Lessor and Lessee each represents and warrants to the other that it has not authorized or employed, or acted by implication to authorize or to employ, any real estate broker or salesman to act for it in connection with this Amendment except for Cornish & Carey Commercial Newmark Knight Frank, in the case of Lessor, and Wixen Real Estate Services, in the case of Lessee (collectively, "Brokers"). Brokers will be paid a commission by Lessor pursuant to the terms of a separate agreement. Each party shall indemnify, defend and hold the other party harmless from and against any and all claims by any real estate broker or salesman for a commission, finder's fee or other compensation as a result of any inaccuracy or alleged inaccuracy in the foregoing representation and warranty of the indemnifying party.

## 8. Authority.

(a) <u>Lessee's Authority</u>. Lessee, and each person executing this Amendment on behalf of Lessee, hereby covenants and warrants that (i) <u>Lessee</u> is duly

incorporated and validly existing under the laws of its state of incorporation, (ii) Lessee has and is duly qualified to do business in the state in which the Building is located, (iii) Lessee has full corporate power and authority to enter into this Amendment, (iv) each person (and all of the persons if more than one signs) signing this Amendment on behalf of Lessee is duly and validly authorized to do so, and (v) Lessee has received any and all approvals or consents necessary from any third party which is necessary for this Amendment to be an enforceable obligation of Lessee.

- (b) <u>Lessor's Authority</u>. Lessor and each person executing this Amendment on behalf of Lessor, hereby covenants and warrants that (i) Lessor is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (ii) Lessor has and is duly qualified to do business in the state in which the Building is located, (iii) Lessor has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Amendment and to perform all Lessor's obligations under the Lease, as amended by this Amendment, and (iv) each person (and all of the persons if more than one signs) signing this Amendment on behalf of Lessor is duly and validly authorized to do so.
- 9. <u>Estoppel</u>. Lessee hereby certifies and acknowledges, that as of the date hereof, to the best of Lessee's knowledge, (a) Lessor is not in default in any respect under the Lease, (b) Lessee does not have any defenses to its obligations under the Lease, (c) there are no offsets against rent payable under the Lease, and (d) Lessee has not assigned its interest in the Lease or sublet any of its interest in the Premises to any third party. Lessee acknowledges and agrees that: (i) the representations herein set forth constitute a material consideration to Lessor in entering into this Amendment; (ii) such representations are being made by Lessee for purposes of inducing Lessor to enter into this Amendment; and (iii) Lessor is relying on such representations in entering into this Amendment.
- 10. Lease in Full Force and Effect. Except as provided in this Amendment, the Lease is unmodified hereby and remains in full force and effect.

(Signature Page to Follow)

IN WITNESS WHEREOF, the parties have agreed to the terms of this Amendment as of the date first written above.

"Lessor"

TARIGO-PAUL, LLC, a California limited liability company

By: North Parcel Management, Inc., a California corporation, its managing member

By: /s/ Jay Paul

Name: Jay Paul

Title: President and Secretary

"Lessee"

SYNOPSYS, INC., a Delaware corporation

By: /s/ Janet S. Collinson

Name: Janet S. Collinson

Title: Sr. VP HR & Facilities

[\*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

## TP SPE LLC c/o Jay Paul Company, Four Embarcadero Center, Suite 3620 San Francisco, California 94111

September 25, 2012

Certified Mail Return receipt requested

Synopsys, Inc. 700 E. Middlefield Road Mountain View, CA 94043

Re: Lease of Space at 445 and 455 N. Mary Avenue, Sunnyvale, California (the "Building")

## Ladies and Gentlemen:

The undersigned is the owner of the Building and the landlord under your lease of space in the Building (your "Lease").

By this letter, you are hereby directed (1) to make all checks, in payment of rent and other sums due to the landlord under your lease, payable to the order of "TP SPE LLC, for the benefit of German American Capital Corporation, as beneficiary, Account No. [\*]", and (2) to deliver such checks or otherwise make such payments as follows:

By Wire:

Bank Name: Wells Fargo Bank, NA

ABA Number: [\*] Account Number: [\*]

Account Name: Deposit Account for German American Capital Corporation, as Beneficiary of TP SPE LLC

The foregoing direction is irrevocable, except with the written consent of our beneficiary, German American Capital Corporation (or its successors or assigns), notwithstanding any future contrary request or direction from the undersigned or any other person (other than German American Capital Corporation (or its successors or assigns)). Thank you for your cooperation.

Very truly yours,

## TP SPE LLC

By /s/ Phillip A. Verinsky

Name: Phillip A. Verinsky Title: Authorized Signer

<sup>[\*] =</sup> Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

[\*] = Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

690 E. Middlefield Road Fee, LLC c/o Dostart Development Company, LLC 145 Addison Avenue Palo Alto, CA 94301

May 9, 2012

SYNOPSYS, INC. 700 E. Middlefield Road Mountain View, CA 94043

Attn: Vice President, Real Estate and Facilities

Re: <u>Lease Agreement dated October 14, 2011 by and between 690 E. Middlefield Road Fee. LLC, as Lessor, and Synopsys, LLC, as Lessee, concerning that certain real property located at 690 E. Middlefield Road, Mountain View, California 94043</u>

#### Gentlemen:

Reference is made to that certain Lease Agreement (the "**Lease**") dated as of October 14, 2011 by and between 690 E. Middlefield Road Fee, LLC, a Delaware limited liability company (the "**Prior Landlord**") and Synopsys, Inc., a Delaware corporation (the "**Tenant**"), concerning that certain real property located at 690 E. Middlefield Road, Mountain View, California (the "**Premises**"). This letter shall constitute notice to you that the Prior Landlord recently sold the Premises (the "**Transaction**") to KR 690 Middlefield, LLC, a Delaware limited liability company (the "**Purchaser**"). Please note that, in connection with the Transaction, the Lease has been assigned by the Prior Landlord to the Purchaser.

You are hereby directed to make all future payments of rent and other sums due under the Lease directly to KR 690 Middlefield, LLC. Accordingly, commencing immediately, rent and all other sums due under the Lease should be paid as follows:

(A) If paying by check, money order or other instrument, please *mail* such items to the following address:

KR 690 Middlefield, LLC c/o Kilroy Realty, L.P. 12200 West Olympic Blvd., Suite 200 Los Angeles, CA 90064

- (B) If paying by wire transfer, such amounts are to be transferred by wire to the following account:
  - <u>Beneficiary Bank:</u>
     Union Bank
     445 S. Figueroa Street,
     Los Angeles, California 90071-1602

Synopsys, Inc. May 9, 2012

• *ABA Number:* [\*]

• <u>Beneficiary Account Holder</u>: Kilroy Realty LP

• Beneficiary Account Number: [\*]

• Upon wiring, please send email notification of the same to: Cmallaber@kilroyrealty.com

All payments under the Lease must be delivered to the above referenced account no later than the day on which such amounts are due pursuant to the terms of the lease.

Effective as of the date of this letter, any notices to Landlord under the Lease must be sent, transmitted, or delivered, as the case may be, to the following addresses:

KR 690 Middlefield, LLC c/o Kilroy Realty, L.P. 12200 West Olympic Boulevard, Suite 200 Los Angeles, California 90064 Attention: Legal Department

with copies to:

Kilroy Realty Corporation 4400 Bohannon Drive Building Management Office, Suite 240 Menlo Park, California 94025 Attention: Property Manager

and

Kilroy Realty Corporation 100 First Street Office of the Building, Suite 250 San Francisco, California 94105 Attention: Asset Manager

and

Allen Matkins Leck Gamble Mallory & Natsis LLP 1901 Avenue of the Stars, Suite 1800 Los Angeles, California 90067 Attention: Anton N. Natsis, Esq.

As part of the Transaction, the letter of credit held by the Prior Landlord with respect to the Lease has been transferred to, and the Prior Landlord's obligations with respect to such letter of credit have been assumed by the Purchaser as of the date of this letter. Any and all

<sup>[\*] =</sup> Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

Synopsys, Inc. May 9, 2012

payments of rent (or other sums due under the Lease) hereafter paid to any party other than the Purchaser shall not relieve you of the obligation of making said payment to the Purchaser.

Sincerely,

## PRIOR LANDLORD:

690 E. MIDDLEFIELD ROAD FEE, LLC, a Delaware limited liability company

By: DDC Rock 690 E. Middlefield, LLC, a Delaware limited liability company, Its Sole Member

By: DDC 690 E. Middlefield Road Associates, LLC, a Delaware limited liability company, Its Manager

By: /s/ Mollie Ricker
Name: Mollie Ricker

Title: Authorized Representative

<sup>[\*] =</sup> Certain confidential information contained in this document, marked by brackets, has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 promulgated under the Securities Exchange Act of 1934, as amended.

# SUBSIDIARIES OF SYNOPSYS, INC.

	Jurisdiction of
Name	Incorporation
Abigail (UK) Ltd.	United Kingdom
Alarity Corporation	Delaware
ARC International (UK) Ltd.	United Kingdom
ARC International Cambridge Ltd.	United Kingdom
ARC International I.P., Inc.	Delaware
ARC International Intellectual Property, Inc.	California
ARC International Israel	Israel
ARC International Limited	United Kingdom
ARC International Nashua, Inc.	New Hampshire
ARC International Nova Scotia	Canada
ARC International Nova Scotia Holdings Ltd.	Canada
ARC International Overseas Holdings Ltd.	United Kingdom
ARC International Software Stacks	Canada
ARC International U.S. Holdings, Inc.	Delaware
ArchPro Design Automation, Inc.	Delaware
Atlantic Acqco, LDA	Portugal
Beijing Magma Design Automation Co., Ltd.	China
Chipidea Microelectronica (Macau), Limitada	Macau
Chipidea Microelectronics (Suzhou) Co. Ltd.	China
Chusik Hoesa Magma Design Automation Korea, Inc.	Korea
Ciranova, Inc.	California
CoWare LLC	Delaware Delaware
CoWare Strategic Corporation	France
Emulation & Verification Engineering S.A.  EVE Design Automation Pvt. Ltd.	India
EVE Design Automation Fvt. Ltd.  EVE Electronic Technology (Shanghai) Ltd. Co.	China
EVE Korea Inc.	Korea
EVE Tunisie SARL	Tunisia
EVE-USA, Inc.	Delaware
Expert IO LLC	California
Extreme DA LLC	Delaware
Extreme Design Automation Software India Private Limited	India
Ingot Systems, Inc.	California
Knights Technology Incorporated	Oregon
Lingcon, LLC	Delaware
Magma Design Automation B.V.	The Netherlands
Magma Design Automation Cayman Ltd.	Cayman Islands
Magma Design Automation Corp. (Canada)	Canada
Magma Design Automation GmbH	Germany
Magma Design Automation India Private Limited	India
Magma Design Automation LLC	Delaware
Magma Design Automation Ltd.	Israel
Magma Design Automation Ltd.	United Kingdom
Magma Design Automation SARL	France
Magma Design Automation Taiwan Ltd.	Taiwan
Magma Services LLC	Delaware
Maude Avenue Land Corporation	Delaware
Nassda Corporation	Delaware
Nihon EVE KK	Japan

Name Jurisdiction of Incorporation

Nihon Synopsys G.K. Japan Novas Software Inc. British Virgin Islands Optical Research Associates LLC California Rsoft Design Group KK Japan RSoft Design Group, Inc. Delaware RSoft Design UK Ltd. United Kingdom Rsoft, Inc. **New York** S.N.P.S. Israel Limited Israel SNPS Belgium NV Belgium **SNPS Mauritius Limited** Mauritius SNPS Netherlands Holding Cooperatief U.A. The Netherlands SNPS Portugal Lda Portugal Sonic Focus Inc. California SpringSoft (S.W.) Ltd. Israel SpringSoft (Shanghai) Co., Ltd. China SpringSoft (Xiamen) Co., Ltd. China SpringSoft Design Automation Ltd United Kingdom SpringSoft Inc. Taiwan SpringSoft K.K. Japan SpringSoft SAS France SpringSoft USA, Inc. California SpringSoft, Inc. British Virgin Islands Synopsys (Beijing) Company Limited China Synopsys (India) EDA Software Private Limited India Synopsys (India) Private Limited India Synopsys (Northern Europe) Limited United Kingdom Synopsys (Shanghai) Co., Ltd. China Synopsys (Singapore) Pte. Limited Singapore Synopsys (Wuhan) Company Limited China Synopsys AGLS Turkey Synopsys Armenia CJSC Armenia Synopsys Australia Pty Limited Australia Synopsys Canada Holdings ULC Canada Synopsys Canada ULC Canada Synopsys Chile Limitada Chile Synopsys China Holdings, Ltd. Bermuda Synopsys Denmark ApS Denmark Synopsys Finland OY Finland Synopsys Global Kft. Hungary Synopsys GmbH Germany Synopsys Hardware Platforms Group AB Sweden Synopsys International Holdings Inc. Delaware Synopsys International Inc. (FSC) Barbados Synopsys International Limited Ireland Synopsys International Old Limited Ireland Synopsys International Services, Inc. Delaware Synopsys Ireland Limited Ireland Synopsys Italia S.r.l. Italy Synopsys Korea, Inc. Korea Synopsys LLC. Russia

The Netherlands

Poland

France

Synopsys Netherlands BV

Synopsys Poland Sp.z.o.o.

Synopsys SARL

Jurisdiction of Name Incorporation Synopsys Scandinavia AB Synopsys SPb. Sweden Russia Synopsys Switzerland LLC Switzerland Synopsys Taiwan Limited Synopsys Technologies Holding LLC Taiwan Delaware Synplicity Israel, Ltd Israel Synplicity LLC California VaST Systems Technology LLC VCEDA Parters Delaware British Virgin Islands British Virgin Islands California VChina Partners Virage Logic International Virage Logic LLC Delaware VL BV The Netherlands VL CV The Netherlands

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

The Board of Directors Synopsys, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-84517 and 333-68011) on Form S-3 and (Nos. 333-174587, 333-169275, 333-166274, 333-157791, 333-151067, 333-151070, 333-116222, 333-45056, 333-38810, 333-32130, 333-90643, 333-84279, 333-77597, 333-56170, 333-63216, 333-77000, 333-97317, 333-97319, 333-99651, 333-100155, 333-103418, 333-103635, 333-103636, 333-106149, 333-108507, 333-77127, 333-68883, 333-45181, 333-42069, 333-22663, 333-75638, 333-71056, 333-125224, 333-125225, 333-134899, 333-181875, and 333-179940) on Form S-8 of Synopsys, Inc. and subsidiaries (the Company) of our report dated December 20, 2012, with respect to the consolidated balance sheets of the Company as of November 3, 2012 and October 29, 2011, and the related consolidated statements of operations, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended November 3, 2012, and the effectiveness of internal control over financial reporting as of November 3, 2012, which report appears in the November 3, 2012 annual report on Form 10-K of Synopsys, Inc.

Our report dated December 20, 2012, on the effectiveness of internal control over financial reporting as of November 3, 2012, contains an explanatory paragraph that states that the Company excluded from their evaluation the internal control over financial reporting of SpringSoft, Inc., of which the Company purchased a controlling interest as of October 1, 2012, and Emulation & Verification Engineering S.A. (EVE), which Synopsys, Inc. acquired on October 4, 2012, as discussed in Note 3 of the notes to the consolidated financial statements. As of and for the year ended November 3, 2012, SpringSoft, Inc. and EVE represented, in the aggregate, less than 4% and 1% of consolidated total assets and total revenue, respectively.

/s/ KPMG LLP

Santa Clara, California December 20, 2012

#### CERTIFICATION

- I, Aart J. de Geus, certify that:
- I have reviewed this Annual Report on Form 10-K of Synopsys, Inc.;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 20, 2012 /s/ Aart J. de Geus

Aart J. de Geus Co-Chief Executive Officer and Chairman (Co-Principal Executive Officer)

#### **CERTIFICATION**

- I, Chi-Foon Chan, certify that:
- I have reviewed this Annual Report on Form 10-K of Synopsys, Inc.;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 20, 2012 /s/ Chi-Foon Chan

Chi-Foon Chan
Co-Chief Executive Officer and President
(Co-Principal Executive Officer)

#### **CERTIFICATION**

- I, Brian M. Beattie, certify that:
- I have reviewed this Annual Report on Form 10-K of Synopsys, Inc.;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 20, 2012 /s/ Brian M. Beattie

Brian M. Beattie Chief Financial Officer (Principal Financial Officer)

# Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Section 1350, Chapter 63 of Title 18 of the United States Code (18 U.S.C-§1350), each of Aart J. de Geus, Co-Chief Executive Officer and Chairman of Synopsys, Inc., a Delaware corporation (the "Company"), Chi-Foon Chan, Co-Chief Executive Officer and President of the Company, and Brian M. Beattie, Chief Financial Officer of the Company, does hereby certify, to such officer's knowledge that:

The Annual Report on Form 10-K for the fiscal year ended October 31, 2012 (the "Form 10-K") to which this Certification is attached as Exhibit 32.1 fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act. The information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 20th day of December, 2012.

/s/ Aart J. de Geus
Aart J. de Geus
Co-Chief Executive Officer and Chairman
/s/ Chi-Foon Chan
Chi-Foon Chan
Co-Chief Executive Officer and President
/s/ Brian M. Beattie
Brian M. Beattie
Chief Financial Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) and is not deemed filed with the Securities and Exchange Commission as part of the Form 10-K or as a separate disclosure document and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.