



# **Notice of 2017 Annual Meeting and Proxy Statement**

**April 6, 2017 • Sunnyvale, CA**





## Notice of 2017 Annual Meeting of Stockholders April 6, 2017

Dear Stockholder,

You are cordially invited to attend the 2017 Annual Meeting of Stockholders of Synopsys, Inc., a Delaware corporation, which will be held on April 6, 2017, at 8:00 a.m. Pacific Time at our office located at 1030 West Maude Avenue, Sunnyvale, California 94085. We are holding the meeting for the following purposes, which are more fully described in the attached Proxy Statement:

1. To elect ten directors nominated by our Board of Directors to hold office until the next annual meeting of stockholders or until their successors have been elected
2. To approve our 2006 Employee Equity Incentive Plan, as amended, in order to, among other items, increase the number of shares available for issuance under the plan by 5,000,000 shares
3. To approve our 2017 Non-Employee Directors Equity Incentive Plan
4. To approve, on an advisory basis, the frequency with which to hold an advisory vote on executive compensation
5. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this Proxy Statement
6. To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending October 28, 2017
7. To consider any other matters that may properly come before the meeting

All of our stockholders of record at the close of business on February 10, 2017 are entitled to attend and vote at the annual meeting. A list of registered stockholders entitled to vote at the meeting will be available at our office located at 690 East Middlefield Road, Mountain View, California 94043, for ten days prior to the meeting and at the meeting location during the meeting.

Whether or not you plan to attend the annual meeting, we urge you to cast your vote. For most items being put to a vote, if you do not provide voting instructions via the Internet, by telephone, or by returning the proxy card or voting instruction card, your shares will not be voted. Please vote as promptly as possible. Every stockholder vote is important.

Sincerely yours,

John F. Runkel, Jr.  
General Counsel and  
Corporate Secretary

Mountain View, California  
February 17, 2017

**Important Notice Regarding the Internet Availability of Proxy Materials  
for the Annual Meeting to Be Held on April 6, 2017**

The Proxy Statement and our 2016 Annual Report on Form 10-K will be available at  
<http://materials.proxyvote.com/871607> on or about February 21, 2017

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## Proxy Statement for the 2017 Annual Meeting of Stockholders to Be Held April 6, 2017

We are providing these proxy materials to you in connection with Synopsys' 2017 Annual Meeting of Stockholders to be held on Thursday, April 6, 2017 at 8:00 a.m. Pacific Time at our office located at 1030 West Maude Avenue, Sunnyvale, California 94085 (referred to in this Proxy Statement as the Annual Meeting). The solicitation by this Proxy Statement is made by Synopsys, Inc.

This Proxy Statement contains important information for you to consider when deciding how to vote on the matters brought before the Annual Meeting. Please read it carefully. You do not need to attend the Annual Meeting in order to vote.

If your shares are held through a broker, bank, or other agent and not in your name, your broker is not permitted to vote on your behalf on proposals where broker discretionary votes are not allowed, as indicated below. Thus for most items being put to a vote, if you do not provide voting instructions via the Internet, by telephone, or by returning the proxy card or voting instruction card, your shares will not be voted.

We strongly encourage all stockholders to vote, and to do so as promptly as possible. The deadline for voting by Internet or phone is 11:59 p.m. Eastern Time on April 5, 2017.

### Annual Meeting Agenda

Proposal	Proxy Statement Page Numbers	Board's Recommendation	Vote Required for Approval	Broker Discretionary Votes Allowed
<b>Proposal 1:</b> Election of Directors	3—20	<b>FOR all nominees</b>	The ten nominees receiving the highest number of FOR votes will be elected. Nominees receiving more WITHHOLD votes than FOR votes must offer their resignation to the Board.	No
<b>Proposal 2:</b> Approval of Our 2006 Employee Equity Incentive Plan, as Amended	21—34	<b>FOR</b>	FOR votes must exceed votes AGAINST.	No
<b>Proposal 3:</b> Approval of Our 2017 Non-Employee Directors Equity Incentive Plan	35—41	<b>FOR</b>	FOR votes must exceed votes AGAINST.	No
<b>Proposal 4:</b> Advisory Vote to Approve Frequency of Executive Compensation Advisory Vote	42	<b>1 Year</b>	The option of 1 Year, 2 Years or 3 Years receiving the most votes will be approved.	No
<b>Proposal 5:</b> Advisory Vote to Approve Executive Compensation	43	<b>FOR</b>	FOR votes must exceed votes AGAINST.	No
<b>Proposal 6:</b> Ratification of Selection of Independent Registered Public Accounting Firm	78	<b>FOR</b>	FOR votes must exceed votes AGAINST.	Yes

## **Questions and Answers about the Annual Meeting and Voting**

Please see the “About the Annual Meeting” section beginning on page 84 for answers to common questions about the Annual Meeting, voting, attendance, submitting a proposal for next year’s annual meeting of stockholders, and other procedures.

## **A Note about Our Fiscal Year**

Our fiscal year generally ends on the Saturday nearest to October 31. Fiscal 2016 ended on October 29, 2016. Fiscal 2017 will end on October 28, 2017.

## Proposal 1 – Election of Directors

We are asking our stockholders to vote for the election of ten directors at the Annual Meeting. We do not have a classified or staggered Board of Directors. Each of our directors stands for election on an annual basis, and of the eleven current directors whose term expires in 2017, ten directors are standing for re-election. As previously announced, Alfred Castino has decided not to stand for re-election at the end of his term at the Annual Meeting.

In light of Mr. Castino's departure at the end of his term, in February 2017 the Board of Directors (also referred to in this Proxy Statement as the Board) expanded the full Board size to eleven members and elected Mercedes Johnson to the Board in accordance with our Amended and Restated Bylaws. The Board also voted to reduce the size of the Board back to ten members immediately following the expiration of Mr. Castino's term at the Annual Meeting. Accordingly, only ten directors are nominated and eligible for election at the Annual Meeting.

The Corporate Governance and Nominating Committee of our Board of Directors (referred to in this Proxy Statement as the Governance Committee), consisting solely of independent directors as determined by the Board under applicable NASDAQ listing standards, recommended each of our ten remaining current directors for nomination by our full Board. Based on that recommendation, our Board has nominated those ten directors for election at the Annual Meeting.

Provided that there is a quorum at the Annual Meeting, the ten nominees receiving the highest number of "For" votes of the shares present in person or represented and entitled to vote at the Annual Meeting will be elected as directors. In the event a nominee is unable or declines to serve as a director, the proxies will be voted at the Annual Meeting for any nominee who may be designated by our Board to fill the vacancy. As of the date of this Proxy Statement, our Board is not aware of any nominee who is unable or will decline to serve as a director. Each director to be elected at the Annual Meeting will serve until our next annual meeting of stockholders and until his or her successor is elected and qualified or, if earlier, the director's death, resignation or removal.

You may either vote "For" all the nominees or you may "Withhold" your vote for any nominee you specify. Unless marked otherwise, proxies returned to us will be voted for each of the nominees named below. If you hold your shares through a bank, a broker or other holder of record, you must instruct your bank, broker or other holder of record to vote so that your vote can be counted for this Proposal 1. Broker non-votes will have no effect on the vote for this Proposal 1.

Proposal 1 is an uncontested election. In addition to the voting requirements under Delaware law described above, our Corporate Governance Guidelines provide that in an uncontested election, any nominee for director who receives a greater number of votes "Withheld" from his or her election than votes "For" such election will, promptly following certification of the stockholder vote, submit to our Board a letter of resignation for consideration by the Governance Committee. Our Board, after taking into consideration the recommendation of the Governance Committee, will determine whether to accept the director's resignation. Synopsys will publicly disclose the decision reached by our Board and the reasons for such decision.

**Our Board of Directors Recommends that You Vote FOR All Nominees**

### Our Director Nominees

Information regarding the nominees, including information they have furnished as to their principal occupations, certain other directorships they hold, or have held, and their ages as of the Record Date, February 10, 2017, is set forth below. The section titled "Director Nominations" on page 15 of this Proxy Statement provides additional information on the director nomination process. The nominee descriptions below and the section titled "Director Qualifications" on page 14 of this Proxy Statement contain information about the skills and other qualifications that led the Governance Committee to determine that these nominees should serve as our directors.

Other than Dr. de Geus and Dr. Chan, all nominees are independent as determined by the Board under the applicable listing standards of the NASDAQ Global Select Market. There are no family relationships among any of the director nominees, directors and/or any of Synopsys' executive officers.

## Aart J. de Geus

*Co-Chief Executive Officer and Chairman of the Board*

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**Age:** 62

**Director since** 1986

**Synopsys Board Committees:**

None

**Public Company Directorships:**

- Applied Materials, Inc.

Dr. 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. He has served as Co-Chief Executive Officer with Dr. Chi-Foon Chan since May 2012. 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 director 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.

As a co-founder of Synopsys, Dr. de Geus has led Synopsys for 30 years, and is considered a pioneer in the electronic design automation (referred to as EDA in this Proxy Statement) industry. Dr. de Geus brings to our Board a unique and thorough understanding of our business, industry and culture. He provides strong executive leadership and vision and maintains a global network of customer and industry relationships. Dr. de Geus also provides our Board with public company board experience.

## Chi-Foon Chan

*Co-Chief Executive Officer and President*

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**Age:** 67

**Director since** 1998

**Synopsys Board Committees:**

None

Dr. 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, he 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 previously held senior management and engineering positions at NEC Electronics and Intel Corporation.

Dr. Chan brings to our Board senior executive-level leadership, strategic, and operational experience with Synopsys as well as within the overall EDA industry. Dr. Chan has been with Synopsys for over 26 years and served as our Chief Operating Officer and President for over 15 years before being appointed Co-Chief Executive Officer, thus providing our Board with a thorough understanding of our business, operations and technology strategies. He has broad knowledge of the overall EDA industry landscape, and he provides particular expertise in the Asia-Pacific region. Dr. Chan also provides our Board extensive research and development and engineering experience in the semiconductor industry gained from his leadership positions at NEC and Intel.

## Janice D. Chaffin

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**Age:** 62  
**Director since** 2014  
**Independent**

**Synopsys Board Committees:**

- Audit

**Public Company Directorships:**

- PTC Inc.

**Former Public Company Directorships Held in Last Five Years:**

- International Game Technology

Ms. Chaffin was appointed to our Board of Directors in December 2014. She held several senior executive positions with Symantec Corporation, most recently as Group President, Consumer Business Unit, from April 2007 to March 2013, and previously as Executive Vice President and Chief Marketing Officer from 2006 to 2007 and Senior Vice President and Chief Marketing Officer from 2003 to 2006. Before joining Symantec, Ms. Chaffin spent more than twenty years with Hewlett-Packard Company in a variety of management and marketing leadership positions. Ms. Chaffin has served on the board of directors of PTC Inc. since August 2013 and served on the board of directors of International Game Technology from September 2010 to April 2015. Ms. Chaffin also served on the operating committee of the privately held Ancestry.com LLC from January 2013 to May 2016.

Ms. Chaffin has extensive senior management experience with large technology companies. As the former Group President, Consumer Business Unit, of Symantec Corporation, a provider of security, storage and systems management solutions, Ms. Chaffin provides our Board with demonstrated expertise in strategic marketing and global operations in the software industry. Ms. Chaffin also provides our Board with significant public company board experience, serving as a director of PTC Inc., and formerly as a director with International Game Technology and with Informatica Corporation from 2001 to 2008.

## Bruce R. Chizen

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**Age:** 61  
**Director since** 2001  
**Independent**

**Synopsys Board Committees:**

- Compensation
- Governance

**Public Company Directorships:**

- Oracle Corporation

Mr. Chizen has been a member of our Board of Directors since April 2001. He is currently an independent consultant and has served as Senior Adviser to Permira Advisers LLP since July 2008 and Venture Partner with Voyager Capital since July 2009. From November 2007 to November 2008, Mr. Chizen served as a strategic adviser to Adobe Systems Incorporated, a provider of design, publishing and imaging software for print, Internet and dynamic media production. From December 2000 to November 2007, he served as Adobe's Chief Executive Officer and served as its President from April 2000 to January 2005. He previously held various other positions at Adobe dating back to 1994. Mr. Chizen has served on the board of directors of Oracle Corporation since July 2008, the operating committee of the privately held Ancestry.com LLC from January 2013 to May 2016, and the board of directors of Adobe from December 2000 to April 2008.

Mr. Chizen has significant expertise in the management of complex global organizations. As the former Chief Executive Officer of Adobe, Mr. Chizen provides our Board with executive-level insight into the challenges associated with operating in a high technology industry and a multi-billion dollar company. Additionally, Mr. Chizen brings significant financial, product management and marketing expertise, which he gained through various leadership positions at Adobe. Mr. Chizen also provides extensive public company board experience to our Board.

## Deborah A. Coleman

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**Age:** 64  
**Director since** 1995  
**Independent**

**Synopsys Board Committees:**

- Audit (*Chair*)

Ms. Coleman has been a member of our Board of Directors since November 1995. Ms. Coleman is a general partner of SmartForest Ventures, a venture capital firm, which she co-founded in June 2000. Ms. Coleman has held various senior executive-level positions throughout her career, including Chairman, Chief Executive Officer and President of Merix Corporation, a manufacturer of printed circuit boards, and Chief Financial Officer and Vice President of Operations of Apple, Inc. Ms. Coleman served on the board of directors of Applied Materials, Inc. from March 1996 to March 2009.

Ms. Coleman has significant experience leading large public technology companies. She brings to our Board executive-level management and financial expertise. Additionally, Ms. Coleman provides our Board with extensive operations and manufacturing experience through her leadership positions at Merix and Apple. Having served over ten years as a director of Applied Materials, Ms. Coleman brings extensive public company board experience, as well as a thorough understanding of the semiconductor industry, to our Board.

## Mercedes Johnson

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**Age:** 62  
**Director since** 2017  
**Independent**

**Synopsys Board Committees:**

- Audit

**Public Company Directorships:**

- Intersil Corporation
- Juniper Networks, Inc.
- Micron Technology, Inc.
- Teradyne, Inc.

Ms. Johnson has been a member of our Board of Directors since February 2017. Ms. Johnson previously served as Interim Chief Financial Officer of Intersil Corporation from April 2013 to September 2013, Chief Financial Officer of Avago Technologies, Inc. from 2005 to 2008, and Senior Vice President, Finance and Chief Financial Officer of Lam Research Corporation from 1997 to 2004. For the past 12 years, Ms. Johnson has served as a board member for a number of public companies including Storage Technology Corporation, Intersil Corporation, Micron Technology, Inc., Juniper Networks, Inc. and Teradyne, Inc.

Ms. Johnson brings a wealth of experience from her current and previous board and chief financial officer roles at public and private companies. She provides both a domestic and international perspective having served on the boards and audit committees of multi-billion dollar technology companies with a worldwide presence. Besides financial expertise, Ms. Johnson bring significant information technology and semiconductor experience, which she gained through various leadership positions at Avago Technologies, Inc., Lam Research Corporation and Applied Materials, Inc.

## Chrysostomos L. “Max” Nikias

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**Age:** 64  
**Director since** 2011  
**Independent**

**Synopsys Board Committees:**

- Compensation (*Chair*)

Dr. Nikias has been a member of our Board of Directors since July 2011. Since August 2010, Dr. Nikias has served as President of the University of Southern California (USC). Dr. Nikias previously served as USC’s provost and chief academic officer from 2005 through 2010 and as dean of USC’s Viterbi School of Engineering from 2001 through 2005. From 1996 through 2001, he was the founding director of the National Science Foundation-funded Integrated Media Systems Center. Dr. Nikias has worked as a consultant for numerous corporations and the U.S. government, including the U.S. Department of Defense. Dr. Nikias is a fellow of the American Academy of Arts & Sciences, a member of the National Academy of Engineering, a fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the American Association for the Advancement of Science (AAAS), and a charter fellow of the National Academy of Inventors.

As President of USC, Dr. Nikias oversees the operations of a major private research university, and he brings leadership and technical expertise to our Board. Dr. Nikias has extensive experience in directing engineering research and development programs, as well as a deep understanding of global technology trends. A recognized scholar in the fields of digital signal processing and communications systems, among others, Dr. Nikias also provides our Board with broad engineering knowledge.

## John Schwarz

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**Age:** 66  
**Director since** 2007  
**Independent**

**Synopsys Board Committees:**

- Governance (*Chair*)

**Public Company Directorships:**

- Teradata Corp.

Mr. Schwarz has been a member of our Board of Directors since May 2007. Since May 2010, Mr. Schwarz has served as co-founder and Chief Executive Officer of Visier Inc., a business analytics software firm. Mr. Schwarz previously served on the executive board of SAP AG from March 2008 to February 2010. Mr. Schwarz was the Chief Executive Officer of Business Objects S.A., a provider of business intelligence software and services, from September 2005 through its acquisition by SAP in January 2008, and he served as the Chief Executive Officer of SAP’s Business Objects unit through February 2010. Mr. Schwarz served on Business Objects’ board of directors from January 2006 until its acquisition in January 2008. Mr. Schwarz has also served as the President and Chief Operating Officer of Symantec Corporation and as President and Chief Executive Officer of Reciprocal Inc. Mr. Schwarz previously spent 25 years at IBM Corporation, where he was most recently General Manager of IBM’s Industry Solutions Unit. Mr. Schwarz has served as a director at Teradata Corporation since September 2010 and at SuccessFactors, Inc. from September 2010 to June 2011.

As the former Chief Executive Officer of Business Objects, Mr. Schwarz led a large international software company and brings to our Board extensive management expertise and knowledge of the software industry. Mr. Schwarz understands the complexities of leading a global organization and operating in international markets. Mr. Schwarz also provides our Board with public company board experience.

## Roy Vallee

*Lead Independent Director*

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**Age:** 64

**Director since** 2003

**Independent**

**Synopsys Board Committees:**

- Audit

**Public Company Directorships:**

- Teradyne, Inc.

**Former Public Company Directorships Held in Last Five Years:**

- Avnet, Inc.

Mr. Vallee has been a member of our Board of Directors since February 2003. From July 2011 to November 2012, Mr. Vallee served as Executive Chairman of the board of directors of Avnet, Inc., a global semiconductor/electronics products and IT distributor. From July 1998 to June 2011, Mr. Vallee served as Avnet's Chief Executive Officer and Chairman of the board of directors. Mr. Vallee also previously served as Avnet's Vice Chairman, President, and Chief Operating Officer. Since February 2000, Mr. Vallee has served on the board of directors of Teradyne, Inc., and he has been its Chairman of the board of directors since May 2014. Beginning in January 2013, Mr. Vallee also served on the board of directors of the Federal Reserve Bank of San Francisco, serving as Chairman from January 2015 to December 2016.

Mr. Vallee provides our Board with significant executive-level leadership expertise, as well as thorough knowledge of the semiconductor industry. Mr. Vallee led Avnet for over 14 years, as CEO and Executive Chairman, and understands the challenges of managing a public technology company in a highly competitive industry. Mr. Vallee also brings public company board experience to our Board, as well as insight into macroeconomic conditions through his previous board role with the Federal Reserve.

## Steven C. Walske

**Age:** 64

**Director since** 1991

**Independent**

**Synopsys Board Committees:**

- Compensation
- Governance

Mr. Walske has been a member of our Board of Directors since December 1991. Mr. Walske has been Managing Director of Myriad Investments, LLC, a private equity firm specializing in investments in software companies, since June 2000. From 1986 through June 2000, Mr. Walske held several executive-level positions at Parametric Technology Corporation, including Chief Executive Officer, President and Chairman of the board of directors. Mr. Walske served on the board of directors of BladeLogic, Inc. from November 2002 to April 2008, holding the Chairman position from September 2005 to April 2008.

As a private equity investor, Mr. Walske provides our Board with financial and strategic planning expertise, as well as extensive knowledge of the software industry and other high-tech industries. Having served as the former Chief Executive Officer of Parametric Technology Corporation, Mr. Walske brings product development and executive-level management expertise as well as an understanding of complex global organizations. Mr. Walske also provides our Board with extensive public company board experience.

# Corporate Governance

## Corporate Governance Guidelines

Our Board of Directors is committed to sound and effective corporate governance practices. Accordingly, our Board has adopted Corporate Governance Guidelines, which are intended to describe the governance principles and procedures by which the Board functions. Our Board regularly reviews and evaluates these guidelines. Among other matters, the Corporate Governance Guidelines cover board composition, board membership criteria, director responsibilities, board committees, evaluation of our Co-Chief Executive Officers, board self-assessment and succession planning. The Corporate Governance Guidelines are available on our website at:

<https://www.synopsys.com/Company/AboutSynopsys/CorporateGovernance/Pages/GovGuidelines.aspx>

Copies of the Corporate Governance Guidelines are also available in print upon written request to Investor Relations, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043.

## Code of Ethics and Business Conduct

Our Board of Directors is committed to ethical business practices and, therefore, we have adopted a Code of Ethics and Business Conduct applicable to all of our Board members, employees and executive officers, including our Co-Chief Executive Officers (Co-Principal Executive Officers), Chief Financial Officer (Principal Financial Officer) and Vice President, Corporate Controller (Principal Accounting Officer). The Code of Ethics and Business Conduct is available on our website at:

<https://www.synopsys.com/content/dam/synopsys/company/corporate-governance/code-ethics-business-conduct-english.pdf>

Synopsys intends to satisfy the public disclosure requirements regarding (1) any amendments to the Code of Ethics and Business Conduct, or (2) any waivers under the Code of Ethics and Business Conduct given to Synopsys' Principal Executive Officers, Principal Financial Officer and Principal Accounting Officer by posting such information on its website at:

<http://www.synopsys.com/Company/AboutSynopsys/CorporateGovernance/Pages/Ethics.aspx>

## Board Leadership Structure

Our Board of Directors believes it is important to have flexibility in selecting our Chairman and board leadership structure. Accordingly, our Corporate Governance Guidelines allow for the positions of Chairman and Chief Executive Officer to be held by the same person. The Board of Directors believes that it is currently in the best interest of Synopsys and its stockholders for Dr. de Geus to serve in both roles. Dr. de Geus co-founded Synopsys and has extensive knowledge of Synopsys, its industry and its culture. He has successfully guided Synopsys through both strong and challenging periods, and his ability to speak as both Chairman and Co-CEO provides strong, consistent leadership for Synopsys.

## Lead Independent Director

Our guidelines also provide for the appointment of a Lead Independent Director in the event that the positions of Chairman and CEO are held by the same person. In February 2017, the Board elected Mr. Vallee to serve as Lead Independent Director, replacing Mr. Walske who had served in that role since 2004. The responsibilities of our Lead Independent Director include:

- Establishing the agenda for regular Board meetings with the Chairman;
- With the Chairman, reviewing and advising on the schedule of regular Board meetings;
- Serving as chairperson of regular Board meetings when the Chairman is unavailable;
- Calling executive sessions of the independent directors, and establishing the agenda for, and presiding at, such sessions;
- Providing feedback from executive sessions to management;
- Serving as liaison between the Co-CEOs and the independent directors;

- Participating in the annual performance evaluation of the Co-CEOs;
- Encouraging dialogue between the independent directors and management; and
- Consulting with stockholders at management's request.

Our Board believes the role of Lead Independent Director provides an appropriate balance in Synopsys' leadership to the combined role of Chairman and CEO, and that the responsibilities assigned to the Lead Independent Director help ensure a strong, independent and active Board.

## Director Independence

Our Corporate Governance Guidelines require that a majority of our Board qualifies as independent directors in accordance with applicable federal securities laws and the listing standards of the NASDAQ Global Select Market. Currently, each member of our Board, other than our Co-Chief Executive Officer and Chairman of the Board, Aart de Geus, and Co-Chief Executive Officer and President, Chi-Foon Chan, is an independent director. All standing committees of the Board are composed entirely of independent directors, in each case under NASDAQ's independence definition. The NASDAQ definition includes a series of objective tests to determine independence, including that the director not be an employee of the company and not have engaged in various types of business dealings with the company. In addition, the Board has made a subjective determination as to each independent director that no relationship exists which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In making these determinations, the Board reviewed and discussed information provided by the directors and Synopsys with regard to each director's business and other outside activities as they may relate to Synopsys and our management. This information included commercial transactions that we entered into, or proposed entering into, in fiscal 2016 with Intersil Corporation; Juniper Networks, Inc; Micron Technology, Inc.; Oracle Corporation; PTC, Inc.; Teradata Corporation; Teradyne, Inc.; Visier, Inc.; and Xerox Corporation. Our non-employee directors or their immediate family members have relationships with these companies. We consider each of these transactions to be at arms' length and in the ordinary course of business. We do not consider any of these transactions to be related-person transactions requiring disclosure under the applicable rules of the Securities and Exchange Commission.

Based on this review and consistent with our independence criteria, the Board has affirmatively determined that all of the directors who are standing for election to our Board except for Dr. de Geus and Dr. Chan are independent.

## Board Meetings and Committees

Our Board of Directors held six meetings during fiscal 2016. During the year, our Board maintained an Audit Committee, a Compensation Committee and a Corporate Governance and Nominating Committee. All such committees have written charters which are available on our website at:

<https://www.synopsys.com/Company/AboutSynopsys/CorporateGovernance/Pages/BoardCommittees.aspx>

The following table summarizes the current composition of our Board committees:

Director	Audit Committee	Compensation Committee	Governance Committee
Aart J. de Geus, <i>Chairman of the Board</i>			
Chi-Foon Chan			
Alfred Castino(1)	•		
Janice D. Chaffin	•		
Bruce R. Chizen		•	•
Deborah A. Coleman	Chair		
Mercedes Johnson(2)	•		
Chrysostomos L. “Max” Nikias		Chair	
John Schwarz			Chair
Roy Vallee, <i>Lead Independent Director</i> (3)	•		
Steven C. Walske		•	•
Total committee meetings held in fiscal 2016	10	7	6

- (1) Mr. Castino is not standing for re-election and will depart the Board at the end of his term at the Annual Meeting.
- (2) Ms. Johnson joined the Board in February 2017.
- (3) Mr. Vallee was elected Lead Independent Director in February 2017, replacing Mr. Walske.

The principal responsibilities of each Board committee are summarized below. For a more extensive description of committee functions, please refer to the committee charters.

## Audit Committee

<b>Members</b>	Deborah Coleman ( <i>Chair</i> ), Alfred Castino(1), Janice D. Chaffin, Mercedes Johnson(2) and Roy Vallee.
<b>Number of fiscal 2016 meetings</b>	Ten
<b>Responsibilities</b>	<p>The Audit Committee acts on behalf of our Board, performing financial oversight responsibilities relating to:</p> <ul style="list-style-type: none"> <li>• The integrity of our financial statements, financial reporting processes and systems of internal accounting and financial controls</li> <li>• Our internal audit function</li> <li>• The annual independent audit of our financial statements</li> <li>• The engagement of our independent registered public accounting firm and evaluation of their performance and independence</li> <li>• Compliance with legal and regulatory requirements that pertain to our financial statements, internal controls over financial reporting, and disclosure controls</li> <li>• Evaluation of enterprise risk issues</li> </ul>
<b>Independence</b>	All members of our Audit Committee are considered independent under the applicable requirements of the Securities and Exchange Commission and the listing standards of the NASDAQ Global Select Market.
<b>Audit Committee financial experts</b>	Our Board has determined that Mr. Castino, Ms. Coleman, Ms. Johnson and Mr. Vallee each qualify as an “audit committee financial expert” within the meaning of the regulations of the Securities and Exchange Commission.

- (1) Mr. Castino is not standing for re-election and will depart the Audit Committee at the end of his term at the Annual Meeting.
- (2) Ms. Johnson joined the Audit Committee in February 2017.

## Compensation Committee

<b>Members</b>	Chrysostomos L. "Max" Nikias ( <i>Chair</i> ), Bruce Chizen, and Steven C. Walske
<b>Number of fiscal 2016 meetings</b>	Seven
<b>Responsibilities</b>	The Compensation Committee primarily reviews and approves our general compensation policies, sets compensation levels for our executive officers (including our Co-CEOs), and administers our equity incentive plan, employee stock purchase plan, deferred compensation plans and 401(k) plan. The Compensation Committee also reviews our non-employee director compensation and recommends any changes to the Board for approval. The Compensation Committee's processes for determining executive compensation are described in the section "Compensation Discussion and Analysis" beginning on page 44.
<b>Independence</b>	All members of our Compensation Committee are considered independent under the applicable requirements of the Securities and Exchange Commission and the listing standards of the NASDAQ Global Select Market. Each member of the Compensation Committee is also a "non-employee director" for purposes of Rule 16b-3 under the Exchange Act and an "outside director" for purposes of Section 162(m) of the Internal Revenue Code.

## Governance Committee

<b>Members</b>	John Schwarz ( <i>Chair</i> ), Bruce Chizen, and Steven C. Walske
<b>Number of fiscal 2016 meetings</b>	Six
<b>Responsibilities</b>	The Governance Committee identifies and recommends to our Board candidates for membership on our Board and Board committees, reviews Board performance, oversees corporate governance matters, and reviews such other matters relating to our management as it deems appropriate. Our Governance Committee also reviews and discusses with management our strategy regarding mergers and acquisitions and strategic investments. Our Governance Committee's policy regarding consideration of director candidates submitted by stockholders is set forth below under "Director Nominations." The Governance Committee recommended the ten nominees for election to our Board at the Annual Meeting.
<b>Independence</b>	All members of our Governance Committee are considered independent under the applicable listing standards of the NASDAQ Global Select Market.

Each director attended at least 75% of all Board and applicable committee meetings that were held during his or her period of service as a director in fiscal 2016.

## Executive Sessions

The independent directors meet in executive sessions without management directors or management present. These sessions take place prior to or following regularly scheduled Board meetings. The directors met in such sessions four times during fiscal 2016.

## Risk Oversight

Our Board is responsible for the oversight of our company-wide risk management efforts and delegates the assessment and implementation of our day-to-day risk management policies to our management. Our Board is directly involved in overseeing risk management issues related to significant matters such as our overall business strategy, major strategic transactions, and executive officer succession through its regular communications with management.

Additionally, each of our standing Board committees has individual oversight responsibilities:

<b>Committee</b>	<b>Primary Areas of Risk Oversight</b>
<b>Audit</b>	<ul style="list-style-type: none"><li>• Risks related to financial reporting and controls.</li><li>• Supervision of the work performed by our independent registered public accounting firm and our internal audit function.</li><li>• Supervision of our anonymous and confidential ethics reporting system, which encourages and allows any employee to submit concerns directly to senior management and the Audit Committee.</li><li>• Risks relating to our investments, financing activities, taxes, and world-wide insurance programs.</li><li>• Risks related to information technology security and data security.</li><li>• Review and approval of related-person transactions.</li></ul>
<b>Compensation</b>	<ul style="list-style-type: none"><li>• Risks related to our cash and equity compensation programs and practices.</li><li>• For additional information regarding the Compensation Committee's assessment of our compensation-related risk, please see the section of this Proxy Statement titled "Compensation Risk Assessment" on page 63.</li></ul>
<b>Governance</b>	<ul style="list-style-type: none"><li>• Risks related to our overall corporate governance, including our governance policies and principles.</li><li>• Risks related to the composition and structure of our Board of Directors and its committees, which includes an annual evaluation of our Board and Board committees, and periodic review of Board member and executive officer succession plans.</li><li>• The committee chairperson, with the assistance of management where appropriate, investigates concerns applicable to our Board and its committees raised through our confidential ethics reporting system.</li></ul>

## Share Ownership Guidelines

In order to better align the interests of our Board members and management with the interests of our stockholders, our Board of Directors first adopted share ownership guidelines in fiscal 2003. Under the current guidelines, non-employee directors are expected to achieve a share ownership level with a value equal to three times the amount of each non-employee director's annual cash retainer (excluding compensation for committee service) or 15,000 shares, within three years of initial election as a director, and maintain such ownership level, as measured each year on the date of the annual meeting of stockholders, so long as they serve in the position of director.

These guidelines also recommend that covered members of management achieve share ownership levels within four years of appointment and maintain such ownership level so long as they serve in such positions as follows: Co-Chief Executive Officer—50,000 shares; Chief Financial Officer—10,000 shares; Chief Technology Officer—10,000 shares; General Counsel—10,000 shares; all Executive Vice Presidents and Senior Vice Presidents who are members of our "Corporate Staff"—10,000 shares; all other Vice Presidents who are members of our Corporate Staff—7,500 shares; and Chief Accounting Officer—2,500 shares.

Each covered member of management is expected to meet the applicable guidelines within four years of becoming a covered person. The guidelines do not require any covered person to exercise stock options or to purchase shares of our common stock on the open market solely to meet these guidelines. However, when stock options are exercised, when restricted stock or restricted stock units vest, or when shares are purchased under our Employee Stock Purchase Plan, the guidelines recommend that the covered person retain a number of shares of common stock equal to the lesser of 25% of the net value of shares of common stock acquired or vested (after deducting the exercise price, if any, and taxes at an assumed tax rate), or a number of shares necessary to reach such person's applicable share ownership guideline amount.

As of February 10, 2017, each non-employee director either held the requisite number of shares or had not yet served for three years since initial election, and accordingly was compliant with the share ownership guidelines. Similarly, as of February 10, 2017, each of our named executive officers either held the requisite number of shares or had not yet served for four years since appointment, and accordingly was compliant.

## **Political Contributions**

In accordance with our Political Activities Policy, Synopsys does not contribute to political parties or candidates, nor do we attempt to influence the outcome of elections through political action committees. We may contribute periodically to local ballot initiatives in California that are consistent with our quality of life goals. We also engage with trade and industry associations in the United States and abroad, which may undertake advocacy on behalf of members. Our Political Activities Policy is available on our website at:

<https://www.synopsys.com/Company/AboutSynopsys/CorporateGovernance/Pages/political-activities-policy.aspx>

## **Stockholder Communications with our Board of Directors**

Stockholders who wish to communicate with our Board of Directors or one or more individual members of our Board may do so by sending written communications addressed to: Corporate Secretary, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043. All stockholder communications we receive that are addressed to our Board of Directors will be compiled by our Corporate Secretary and forwarded to the specified director(s), if any. If the correspondence is not addressed to a particular director, such correspondence will be forwarded, depending on the subject matter, to the Chairperson of the Audit Committee, Compensation Committee, or Governance Committee.

## **Board Attendance at Stockholders' Meetings**

Synopsys encourages director attendance at our annual stockholder meetings, but does not require attendance. Attendance by phone is permitted. All then-current directors attended the 2016 Annual Meeting of Stockholders.

## **Director Qualifications**

The Governance Committee works with our Board to determine the appropriate skills and experience that we seek in Board members in light of our business environment and existing Board composition. All candidates for election or re-election are expected to (1) have sufficient experience in the EDA, semiconductor, electronics or technology industries to enable them to effectively help create and guide our business strategy, (2) be prepared to participate fully in Board activities, including preparation for, attendance at and active participation in, meetings of our Board of Directors, (3) not hold positions that would conflict with their responsibilities to us, (4) have a high degree of personal integrity and interpersonal skills, and (5) be prepared to represent the best interests of all of our stockholders and not just one particular constituency.

When evaluating a particular candidate for Board membership, the Governance Committee and our Board consider many factors, including an understanding of business operations, finance, marketing and other relevant disciplines; professional and educational background; and personal achievement.

They also consider diversity in their assessment of potential candidates, including diversity of professional experience, education, skills and opinions, as well as diversity of personal background.

The Governance Committee and our Board also believe that it is beneficial for at least one member, and preferably multiple members, of our Board to meet the criteria for an “audit committee financial expert” as defined by the applicable rules of the Securities and Exchange Commission. They further deem it to be appropriate for certain members of management to serve on our Board in order to provide our Board with an internal perspective on the operations, management and culture of our business. At the same time, the listing standards of the NASDAQ Global Select Market and our own corporate governance guidelines require that at least a majority of the members of our Board qualify as independent directors in accordance with such standards.

The Governance Committee and our Board consider these criteria regardless of whether the candidate has been recommended by a stockholder or identified by the Governance Committee. At a minimum, a director’s qualifications, in light of the above-mentioned criteria, are considered each time the director is nominated or re-nominated for Board membership. When determining whether to recommend a director for re-election, the Governance Committee also reviews the director’s overall service, including the director’s past attendance at Board and committee meetings and participation in and contributions to the Board.

While the Governance Committee and our Board prioritize maintaining a board that is comprised of directors with a diverse set of skills, experiences, and perspectives, they also recognize the importance of balancing these qualifications with the overall tenure of directors in their long-term approach to board refreshment. The fresh viewpoints and philosophies newer directors bring, coupled with the valuable experience and institutional knowledge the longer-tenured directors possess, benefits the Board and its overall contribution to Synopsys. The Board has thus appointed three highly-qualified new directors since 2010 that bring insight in areas such as strategic marketing in the software industry, research and development programs at a leading academic institution, and information technology systems and financial experience in the semiconductor and software industries. Further, our longer-tenured directors have extensive knowledge of our operations and have the perspective of overseeing our business activities during a wide-array of economic cycles and competitive environments. We believe the current mix of our Board members is the appropriate blend of experience and diverse perspectives that play a critical role in supporting us as we continue to compete in existing semiconductor and electronic design industries as well as new and emerging market segments such as mobile, automotive, digital home, Internet of Things (IoT), and cloud computing.

## **Director Evaluations**

On an annual basis, the Governance Committee conducts an evaluation of our Board of Directors, the functioning of the committees and each individual member of our Board.

## **Director Nominations**

The Governance Committee considers candidates for Board membership suggested by our Board members and management. The Governance Committee has, on occasion, retained third-party executive search firms to identify independent director candidates. The Governance Committee will consider persons recommended by our stockholders in the same manner as a nominee recommended by Board members, management, or a third-party executive search firm. After completing the evaluation and review, the Governance Committee makes a recommendation to the full Board as to the persons who should be nominated to our Board of Directors, and our Board determines and approves the nominees after considering the recommendation and report of the Governance Committee.

Stockholders seeking to recommend a prospective nominee should follow the instructions under the heading “Stockholder Communications with our Board of Directors.” There are no recent material changes to the procedures by which stockholders may recommend nominees for our Board. Stockholder submissions must include the full name of the proposed nominee, a description of the proposed nominee’s business experience for at least the previous five years, complete biographical

information, a description of the proposed nominee's qualifications as a director and a representation that the stockholder submitting the recommendation is a beneficial or record owner of our stock. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected. Stockholders who wish to nominate a candidate for election must follow the procedures described in Article II of our Bylaws.

Each director candidate nominated for election at the Annual Meeting is an existing director seeking re-election to our Board of Directors and, except for Ms. Johnson, was previously elected by our stockholders. Ms. Johnson was appointed to the Board in February 2017 to fill a newly-created vacancy upon the recommendation to our Board of Directors by the Governance Committee based on the evaluations and procedures described above.

## Certain Relationships and Related Transactions

Our Code of Ethics and Business Conduct requires that every employee avoid situations where loyalties may be divided between our interests and the employee's own interests. Employees and directors must avoid conflicts of interest that interfere with the performance of their duties or are not in our best interests.

Pursuant to its written charter, the Audit Committee reviews and approves all related party transactions as such term is used in ASC Topic 850 *Related Party Disclosures*, or as otherwise required to be disclosed in our financial statements or periodic filings with the Securities and Exchange Commission, other than (a) grants of equity awards made by our Board of Directors or any committee thereof or pursuant to an automatic grant plan, or (b) payment of compensation authorized by our Board or any committee thereof. Related-party transactions include transactions between us, our executive officers and directors, beneficial owners of five percent or greater of our securities, and all other related persons specified under Item 404 of Regulation S-K promulgated by the Securities and Exchange Commission. We have adopted written policies and procedures regarding the identification of related parties and transactions, and the approval process for such transactions. The Audit Committee will consider each proposed transaction in light of the specific facts and circumstances presented, including but not limited to the risks, costs, and benefits to us and the availability from other sources of comparable products or services.

From the beginning of fiscal 2016 until the present, there have been no (and there are no currently proposed) transactions involving an amount in excess of \$120,000 in which Synopsys was (or is to be) a participant and any executive officer, director, five percent beneficial owner of our common stock or member of the immediate family of any of the foregoing persons had (or will have) a direct or indirect material interest, except the compensation arrangements described in this Proxy Statement for our named executive officers and directors.

## Director Compensation

Our non-employee directors are compensated for serving on our Board. We do not pay our employees who serve on our Board of Directors any additional compensation for Board membership. Our Compensation Committee reviews our non-employee director compensation with the assistance of a compensation consultant it has determined to be objective and independent. The Compensation Committee reviews such compensation biennially, at a minimum, and recommends adjustments as appropriate. As described in more detail below, the Compensation Committee recommended, and our Board approved, changes in our non-employee director compensation for fiscal 2017.

### Fiscal 2016 Compensation

Our non-employee director compensation consists of cash and equity awards. We also reimburse directors for out-of-pocket expenses for travel to Board meetings in accordance with our Corporate Travel Policy.

#### Cash

For fiscal 2016, we paid non-employee directors an annual retainer of \$125,000 for serving on our Board. We also paid an additional retainer of \$30,000 to the chair of the Audit Committee of our Board of Directors and \$12,500 to the other members of the Audit Committee. The retainers were paid in advance in four equal payments at our regularly scheduled quarterly Board meetings.

#### Equity

For fiscal 2016, non-employee directors were eligible to receive equity awards under the 2005 Non-Employee Directors Equity Incentive Plan (referred to in this Proxy Statement as the 2005 Directors Plan). The plan provides for automatic grants of equity awards to non-employee members of our Board upon their initial appointment or election, and upon their re-election each year.

**Initial Awards.** For fiscal 2016, under the 2005 Directors Plan, new non-employee directors were eligible to receive (1) an initial stock option for 30,000 shares, vesting in equal installments on the date preceding each of the first four annual stockholders' meetings following the grant date, subject to continued Board service through each vesting date, and (2) if appointed to our Board less than eleven months since the most recent annual meeting of stockholders, an "interim award," in the form of stock options, representing an annual award prorated for the period of time remaining until the next annual meeting of stockholders.

**Annual Awards.** For fiscal 2016, under the 2005 Directors Plan, each re-elected non-employee director was eligible to receive an annual award comprised of either a stock option grant, a restricted stock grant or a combination of both, as determined by our Board each year. The annual award in fiscal 2016, which was comprised solely of restricted stock, had an aggregate total fair value on the date of grant equal to \$125,000. The annual restricted stock award vests in three equal annual installments on the day before each of the three annual meetings of stockholders immediately following the grant date, subject to continued Board service. In the event of a change of control or similar transaction, the vesting of unvested grants will generally accelerate unless assumed by the successor company. Our Board of Directors received restricted stock for the annual award for fiscal 2016 and, as a result, we issued 2,589 shares of restricted stock to each non-employee director.

The following table sets forth a summary of the compensation paid to our non-employee directors for services in fiscal 2016.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)(1)	Option Awards (\$)(2)	Total (\$)
Alfred Castino	\$ 137,500(3)	\$ 124,971	\$ —	\$ 262,471
Janice D. Chaffin	137,500(4)	124,971	—	262,471
Bruce R. Chizen	125,000	124,971	—	249,971
Deborah A. Coleman	155,000(5)	124,971	—	279,971
Chrysostomos L. "Max" Nikias	125,000	124,971	—	249,971
John Schwarz	125,000	124,971	—	249,971
Roy Vallee	137,500(6)	124,971	—	262,471
Steven C. Walske	125,000	124,971	—	249,971

- (1) These amounts represent the aggregate grant date fair values, computed in accordance with ASC Topic 718, *Compensation—Stock Compensation*, of restricted stock awards issued pursuant to the 2005 Non-Employee Directors Equity Incentive Plan. The grant date fair value of these awards is calculated using the closing price of our common stock of \$48.27 on the grant date multiplied by the 2,589 shares granted to each non-employee director. These amounts do not represent the actual value that may be realized by the director upon vesting of such awards. For information on the assumptions used to calculate the value of the awards, refer to Note 10 to the consolidated financial statements contained in our 2016 Annual Report on Form 10-K. Such stock awards vest in three equal annual installments on the day before each of the three annual meetings of stockholders immediately following the grant date. At the end of fiscal 2016, our non-employee directors held the following aggregate numbers of unvested restricted stock awards: Mr. Castino—5,458 shares; Ms. Chaffin—4,382 shares; Mr. Chizen—5,458 shares; Ms. Coleman—5,458 shares; Dr. Nikias—5,458 shares; Mr. Schwarz—5,458 shares; Mr. Vallee—5,458 shares; and Mr. Walske—5,458 shares.
- (2) At the end of fiscal 2016, none of our non-employee directors held outstanding option awards, other than Ms. Chaffin (34,222 shares, which remain subject to vesting) and Dr. Nikias (42,147 shares, which are fully vested).
- (3) Includes \$12,500 retainer paid to Mr. Castino for serving as an Audit Committee member in fiscal 2016.
- (4) Includes \$12,500 retainer paid to Ms. Chaffin for serving as an Audit Committee member in fiscal 2016.
- (5) Includes \$30,000 retainer paid to Ms. Coleman for serving as the Audit Committee chairperson in fiscal 2016.
- (6) Includes \$12,500 retainer paid to Mr. Vallee for serving as an Audit Committee member in fiscal 2016.

## Fiscal 2017 Compensation

After the end of fiscal 2016, the Compensation Committee conducted a comprehensive review of our non-employee director compensation with the assistance of Radford, an Aon Hewitt company, its independent compensation consultant. To better align director compensation with the compensation paid by other companies in our peer group, in February 2017, the Compensation Committee recommended, and the full Board approved, certain changes to non-employee director compensation for fiscal 2017.

### Cash Retainer Changes

The Compensation Committee recommended no changes to the annual cash retainer and the cash compensation for the Audit Committee chair, but increased the cash retainer from \$12,500 to \$15,000 for other Audit Committee members.

### ***Equity Awards Changes***

Subject to approval of the 2017 Non-Employee Directors Equity Incentive Plan (referred to in this Proxy Statement as the 2017 Directors Plan):

**Initial Awards.** Initial awards will be granted in the form of stock options with a grant date fair value of \$350,000. These awards will vest in equal installments on the date immediately preceding each of the first three annual meetings following the date of grant.

**Interim Awards.** Interim awards are intended to serve as a pro-rated annual award, and will be granted in the form of restricted stock with a grant date fair market value equal to a pro-rated portion of the annual award of \$175,000. In order to better align with our peers, these awards will vest on the date immediately preceding the first annual meeting following the date of grant.

**Annual Awards.** Annual awards will be granted in the form of restricted stock with a grant date fair market value of \$175,000. In order to better align with our peers, these awards will vest on the date immediately preceding the first annual meeting following the date of grant.

In February 2017, the Board approved the 2017 Directors Plan, subject to the approval of our stockholders at the Annual Meeting. If our stockholders do not approve the 2017 Directors Plan, then the fiscal 2017 compensation changes related to equity awards will not become effective, no awards will be granted under the 2017 Directors Plan, and the non-employee directors will receive the equity awards pursuant to the 2005 Directors Plan.

## **Proposal 2 – Approval of Our 2006 Employee Equity Incentive Plan, as Amended**

We are asking our stockholders to approve our 2006 Employee Equity Incentive Plan, as amended (referred to in this Proxy Statement as the 2006 Employee Plan), primarily to increase the number of shares of common stock available for issuance under the 2006 Employee Plan by 5,000,000 shares, representing approximately 3.3% of our shares of common stock outstanding as of January 23, 2017. We believe equity compensation is a critical tool for employee motivation and retention. We are proposing the share increase to enable us to continue offering effective equity compensation to our employees.

Our Board of Directors approved the 2006 Employee Plan, as amended, in February 2017, subject to stockholder approval. If approved by our stockholders, the amended 2006 Employee Plan will become effective as of the Annual Meeting date.

Approval of the 2006 Employee Plan, as amended, requires the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting, and voting on this Proposal 2, to vote “For” this Proposal 2. Abstentions and broker non-votes will not be counted as either votes cast “For” or “Against” Proposal 2 and have no effect on the vote for this Proposal 2.

**Our Board of Directors Recommends that You Vote FOR  
the Approval of the 2006 Employee Plan, as Amended**

### **Purpose and Background**

The primary goal of the amendment of our 2006 Employee Plan is to provide us with a sufficient reserve of common stock to offer appropriate incentives to our employees. Like other technology companies, we actively compete for highly qualified employees, especially technical employees. Our equity program is a key component of our strategy to attract and retain key individuals, and the share requirements of our equity program have grown with our company.

Each year, the Compensation Committee of our Board of Directors and our management review our overall compensation strategy and determine the allocations of cash and equity compensation in light of our pay-for-performance philosophy. We continue to believe that equity compensation is critical in motivating key employees and that it effectively aligns employee compensation with stockholder interests. The 2006 Employee Plan is the sole available plan for granting equity compensation to our employees. If the amended 2006 Employee Plan is not approved and we are unable to grant equity compensation in the future, we may need to consider other compensation alternatives, such as increasing cash compensation.

We are committed to effectively managing our share reserves for equity compensation while minimizing stockholder dilution. For this reason, we carefully manage both our gross burn rate and net burn rate. Gross burn rate reflects equity awards granted during the fiscal year divided by the number of shares outstanding. Net burn rate reflects equity awards granted during the fiscal year less equity awards cancelled and returned to the plan (net equity grants), divided by the number of shares outstanding.

We endeavor to achieve a gross burn rate that approximates the average rate for our peer group companies as well as for the software and services industry more generally, and to achieve burn rates within the limits published by independent shareholder advisory groups, such as Institutional Shareholder Services (referred to in this Proxy Statement as ISS). While there are several methodologies to arrive at burn rates, using current ISS methodology, our gross burn rates for the last three years are well within the guidelines published by ISS. Detailed information about equity awards issued in fiscal 2016 as well as other relevant information is set forth below.

We note that the cornerstone of our compensation philosophy is pay for performance, as discussed in the Compensation Discussion and Analysis beginning on page 44. In that regard, approximately half of the value of the target equity grants to our named executive officers in fiscal 2016 was in performance-based RSUs. The balance was in stock option grants, whose value is directly linked to the appreciation of our stock price.

## Important Features of the 2006 Employee Plan

We also note that our 2006 Employee Plan includes additional provisions that are designed to protect our stockholders' interests and to reflect corporate governance best practices, including:

- **Stockholder approval required for additional shares.** The 2006 Employee Plan does not contain an annual “evergreen” provision that provides for automatic increases of shares on an ongoing basis. The 2006 Employee Plan instead authorizes a fixed number of shares, and stockholder approval is required for any increase in the number of shares.
- **No discounted stock options or stock appreciation rights.** The 2006 Employee Plan requires that all stock options and stock appreciation rights must have an exercise price equal to or greater than the fair market value of our common stock on the date of grant.
- **Repricing not allowed.** The 2006 Employee Plan expressly prohibits the repricing of equity awards—including the cancellation and re-grant of outstanding equity awards—without prior stockholder approval. The 2006 Employee Plan also expressly prohibits us from buying out stock options whose exercise price exceeds the fair market value of our common stock, often referred to as underwater options, for cash, without stockholder approval.
- **No liberal share recycling.** In general, when awards lapse or are cancelled, the shares reserved for those awards are returned to the share reserve and become available for future awards. However, shares of common stock that are tendered to us in payment of the exercise price of an award or that are withheld to cover tax withholding obligations are not returned to our share reserve.
- **Seven-Year Term.** All equity awards granted under the 2006 Employee Plan have a term of no more than seven years. In 2009, we amended the 2006 Employee Plan to establish seven years as the maximum permissible term for all equity awards, thereby limiting the potential for unproductive overhang.
- **Fungible Share Reserve.** The 2006 Employee Plan has a fungible share reserve, which increases the rate at which the share reserve is depleted for restricted stock unit and restricted stock awards, in order to minimize stockholder dilution.

## New Plan Benefits and Historical Grant Information

No awards have been granted or promised with respect to the additional 5,000,000 shares requested. Awards under our 2006 Employee Plan are made at the discretion of our Board of Directors or the Compensation Committee and are therefore not determinable at this time. The following tables set forth detailed information about our historical equity compensation practices.

## Awards Granted to Certain Individuals and Groups under the 2006 Employee Plan

The following table shows, for each of the named executive officers and the various groups indicated, the number of stock options and restricted stock units granted under the 2006 Employee Plan during fiscal 2016:

Name	Number of Restricted Stock Units Granted(1)	Number of Stock Options Granted(2)
<b>Aart J. de Geus</b> Co-Chief Executive Officer and Chairman of the Board of Directors	38,691(3)	187,007
<b>Chi-Foon Chan</b> Co-Chief Executive Officer and President	38,691(3)	187,007
<b>Trac Pham</b> Chief Financial Officer	10,668(3)	51,560
<b>Brian M. Beattie</b> Executive Vice President, Business Operations and Chief Administrative Officer	10,668(3)	51,560
<b>Joseph W. Logan</b> Executive Vice President, Worldwide Sales and Corporate Marketing	18,240(3)	88,160
<b>John F. Runkel, Jr.</b> General Counsel and Corporate Secretary	8,346(3)	40,340
All executive officers as a group (6 persons)	125,304(3)	605,634
All directors who are not executive officers as a group (9 persons)	—	—
All employees, excluding executive officers, as a group ((10,669) persons as of Oct. 29, 2016)(4)	1,639,559	1,079,478

- (1) The aggregate numbers of restricted stock units granted under the 2006 Employee Plan, since its adoption through January 23, 2017, to Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Beattie, Mr. Logan, Mr. Runkel, all executive officers as a group, all directors who are not executive officers as a group, and all employees (excluding executive officers) as a group were 599,029; 432,196; 66,032; 190,431; 202,403; 38,143; 1,528,234; none; and 14,510,859, respectively. Of those aggregate grant numbers for Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Beattie, Mr. Logan, Mr. Runkel, and all executive officers as a group, 30,644; 30,644; 9,110; none; 16,565; 6,253; and 93,216 restricted stock units, respectively, are eligible to vest only upon the achievement of pre-established performance goals.
- (2) The aggregate numbers of stock option awards granted under the 2006 Employee Plan, since its adoption through January 23, 2017, to Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Beattie, Mr. Logan, Mr. Runkel, all executive officers as a group, all directors who are not executive officers as a group, and all employees (excluding executive officers) as a group were 1,993,430; 1,512,930; 227,138; 928,194; 779,531; 167,160; 5,608,383; none; and 14,701,652, respectively.
- (3) These restricted stock units required the achievement of pre-established performance goals prior to any vesting of the awards.
- (4) Equity grants in fiscal 2016 under the 2006 Employee Plan were made to an aggregate of 2,568 employees, excluding our executive officers.

## Additional Equity Plan Information

The following table provides certain additional information regarding all of our equity plans (except our Employee Stock Purchase Plan):

	As of 1/23/17
Total Stock Options Outstanding	7,527,612
Total Restricted Stock Unit Awards Outstanding	4,027,749
Total Common Stock Outstanding	150,401,244
Weighted-Average Exercise Price of Stock Options Outstanding	\$41.97
Weighted-Average Remaining Duration of Stock Options Outstanding	4.79 years
Total Shares Available for Grant under the 2006 Employee Plan	9,994,701
Total Shares Available for Grant under the 2005 Directors Plan	241,690(1)
	As of 2/10/17 (the Record Date)
Total Common Stock Outstanding	150,475,423

- (1) In accordance with Proposal 3 below, if our stockholders approve the 2017 Directors Plan, the 2005 Directors Plan will terminate as of the date of the Annual Meeting, and any shares remaining available for grant under the 2005 Directors Plan will not be eligible for issuance under the 2005 Directors Plan or the 2017 Directors Plan.

## Information for Burn Rate Calculations

The following table provides detailed information regarding activity under all of our equity plans (except our Employee Stock Purchase Plan) in fiscal 2016.

	Fiscal 2016
Stock Options Granted by Synopsys(1)	1,685,112
Restricted Stock Units Granted by Synopsys(2)	1,764,863
Restricted Stock Awards Granted by Synopsys(3)	20,712
Stock Options Cancelled	64,739
Restricted Stock Units Cancelled(4)	110,815
Restricted Stock Awards Cancelled	—
Weighted-Average Common Stock Outstanding	152,016,948
Common Stock Outstanding at Fiscal Year End	151,453,623

- (1) Granted under the 2006 Employee Plan.
- (2) Granted under the 2006 Employee Plan, and represents the actual number of restricted stock units granted, prior to the application of the fungible share reserve ratio.
- (3) Granted under the 2005 Directors Plan, which does not contain a fungible share reserve ratio. Represents the actual number of restricted stock awards granted. In accordance with Proposal 3 below, if our stockholders approve the 2017 Directors Plan, the 2005 Directors Plan will terminate as of the date of the Annual Meeting, and any shares remaining available for grant under the 2005 Directors Plan will not be eligible for issuance under the 2005 Directors Plan or the 2017 Directors Plan.
- (4) Represents the actual number of restricted stock units cancelled, prior to the reverse application of the fungible share reserve ratio.

## Description of the 2006 Employee Plan, as Amended

The material terms and provisions of the 2006 Employee Plan, as amended, are summarized below. This summary, however, does not purport to be a complete description of the 2006 Employee Plan. The following summary of the 2006 Employee Plan is qualified in its entirety by reference to the complete text of the 2006 Employee Plan, a copy of which is included as an appendix to this Proxy Statement. Any stockholder that wishes to obtain a paper copy of the plan document may do so by written request to: Corporate Secretary, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043.

As further described in this Proposal 2, the 2006 Employee Plan has been amended to provide for:

- an increase of 5,000,000 shares in the share reserve and incentive stock option limits;
- an increase from \$2,000,000 to \$4,000,000 in the maximum benefit to be granted to a participant in any calendar year attributable to performance cash awards, to better align our hiring and retention capabilities with those of our peers; and
- certain clarifying amendments to ease administration, eliminate potential ambiguities in plan interpretation and reflect recent changes in law.

### General

The 2006 Employee Plan was originally adopted by our Board of Directors in March 2006 and approved by stockholders in April 2006 as a successor plan to prior stock option plans for our employees. The 2006 Employee Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock units, stock appreciation rights, and other forms of equity compensation (collectively referred to in this Proxy Statement as equity awards). The 2006 Employee Plan also provides the ability to grant performance equity awards and performance cash awards (together referred to in this Proxy Statement as performance awards), which enable our Compensation Committee to use performance criteria in establishing specific targets to be attained as a condition to the vesting of awards.

Incentive stock options granted under the 2006 Employee Plan are intended to qualify as “incentive stock options” within the meaning of Section 422 of the Internal Revenue Code (referred to in this Proxy Statement as the Code). Non-statutory stock options granted under the 2006 Employee Plan are not intended to qualify as incentive stock options under the Code. See “Federal Income Tax Information” below for a discussion of the tax treatment of equity awards.

### Purpose

The 2006 Employee Plan provides eligible employees and consultants with the opportunity to benefit from increases in the value of our common stock. This creates an incentive for such individuals to exert maximum efforts toward our success, thereby aligning their interests with the interests of our stockholders.

### Administration

The 2006 Employee Plan provides that our Board of Directors has the authority to construe and interpret the 2006 Employee Plan and to determine the persons to whom and the dates on which equity awards will be granted, the number of shares of common stock to be subject to each equity award, the time or times during the term of each equity award within which all or a portion of the award may be exercised, the exercise, purchase, or strike price of each equity award, the type of consideration permitted to exercise or purchase each equity award, and other terms of the equity awards.

Our Board of Directors has the authority to delegate some or all of the administration of the 2006 Employee Plan to a committee or committees composed of members of our Board. In the discretion of our Board of Directors, a committee may consist solely of two or more “non-employee directors” within the meaning of Rule 16b-3 under the Exchange Act or solely of two or more “outside directors” within the meaning of Section 162(m) of the Code. The 2006 Employee Plan also permits delegation of

administration of the plan to one or more executive officers with respect to grants to employees of Synopsys and its subsidiaries. Our Board of Directors has delegated to the Compensation Committee administration of the 2006 Employee Plan with respect to stock option and restricted stock unit awards to executive officers and restricted stock unit awards to our other employees. Our Board of Directors has delegated to each of our Co-Chief Executive Officers, as both officers and members of our Board of Directors, administration of the 2006 Employee Plan with respect to stock option awards to employees other than executive officers, subject to specified limitations and restrictions.

## **Eligibility**

**General.** As of January 23, 2017, Synopsys had 11,294 employees, all of whom were eligible to participate under the 2006 Employee Plan. Our non-employee directors are not eligible to receive any awards under the 2006 Employee Plan.

**Incentive Stock Options.** Incentive stock options may be granted under the 2006 Employee Plan only to employees (including executive officers) of Synopsys and its affiliates. The aggregate maximum number of shares of common stock that may be issued pursuant to the exercise of incentive stock options will be 88,597,248 shares of common stock. Stockholder approval of this Proposal 2 will constitute approval of this maximum limit for incentive stock options.

No incentive stock option may be granted under the 2006 Employee Plan to any person who, at the time of the grant, owns (or is deemed to own) stock possessing more than 10% of the total combined voting power of Synopsys or its affiliates, unless the exercise price of such stock option is at least 110% of the fair market value of the stock subject to the stock option on the date of grant and the term of the stock option does not exceed five years from the date of grant. In addition, the aggregate fair market value, determined on the date of grant, of the shares of common stock with respect to which incentive stock options are exercisable for the first time by a participant during any calendar year (under the 2006 Employee Plan and any other equity plans of Synopsys and its affiliates) may not exceed \$100,000 (any excess of such amount shall be treated as non-statutory stock options).

### **Non-Statutory Stock Options, Restricted Stock, Restricted Stock Units and Other Awards.**

Non-statutory stock options, restricted stock, restricted stock units and all other types of equity awards and performance awards authorized under the 2006 Employee Plan may be granted to employees (including executive officers) and consultants of Synopsys and its affiliates.

**Individual Limit.** No person may be granted stock options or stock appreciation rights under the 2006 Employee Plan covering more than 1,000,000 shares of common stock during any calendar year. Stockholder approval of this Proposal 2 will also constitute a re-approval of the 1,000,000-share limitation for purposes of Section 162(m) of the Code. This limitation allows us to grant stock options or stock appreciation rights under the 2006 Employee Plan that may be exempt from the \$1,000,000 limitation on the income tax deductibility of compensation paid to covered executive officers under Section 162(m) of the Code. The 2006 Employee Plan also includes annual limits on grants of performance awards to individuals, as described below.

## **Stock Subject to the 2006 Employee Plan**

As of January 23, 2017, 9,994,701 shares of common stock were available for future grants under the 2006 Employee Plan. If this Proposal 2 is approved by our stockholders, an additional 5,000,000 shares will be available for future grants under the 2006 Employee Plan. Assuming the stockholders approve this Proposal 2, 88,597,248 of our common stock will have been reserved for issuance under the 2006 Employee Plan.

The number of shares of common stock available for issuance under the 2006 Employee Plan is currently reduced by one share for each share of common stock issued pursuant to a stock option or a stock appreciation right and by 1.70 shares for each share of common stock issued on or after March 29, 2016 pursuant to restricted stock awards, restricted stock unit awards or other awards (excluding options and stock appreciation rights).

If a stock option or stock appreciation right award expires or otherwise terminates without being fully exercised, if shares subject to a restricted stock award or restricted stock unit award are forfeited to or repurchased by us, or if an equity award is settled in cash, the shares not issued under those awards,

or the shares forfeited to or repurchased by us, become available for subsequent issuance under the 2006 Employee Plan. Such returning shares increase the number of shares available for issuance under the 2006 Employee Plan by one share if they were issued pursuant to a stock option or stock appreciation right and, by 1.70 shares if they were issued pursuant to restricted stock awards, restricted stock unit awards or other awards (excluding options and stock appreciation rights).

If shares subject to an award granted under the 2006 Employee Plan are not delivered to a participant because:

- an equity award is exercised through a reduction in the number of shares subject to the equity award (a “net exercise”),
- the appreciation distribution upon exercise of a stock appreciation right is paid in shares of common stock, or
- shares are withheld in satisfaction of applicable withholding taxes,

then those shares do not become available for subsequent issuance under the 2006 Employee Plan. If the exercise price of an award is satisfied by a participant tendering previously held shares, the tendered shares do not become available for subsequent issuance under the 2006 Employee Plan.

## Terms of Stock Options

We may grant stock options under the 2006 Employee Plan pursuant to stock option agreements adopted by our Board of Directors or a duly authorized committee. The following is a description of the permissible terms of stock options under the 2006 Employee Plan. Individual stock option agreements may be more restrictive as to any or all of the permissible terms described below.

**Exercise Price.** The exercise price of incentive stock options and non-statutory stock options may not be less than 100% of the fair market value of the stock subject to the stock option on the date of grant and, in some cases (see “Eligibility” above), may not be less than 110% of such fair market value.

As of February 10, 2017, the closing price of our common stock as reported on the NASDAQ Global Select Market was \$65.29 per share.

**Consideration.** The stock option exercise price may, at the discretion of our Board of Directors, be paid in cash or by check, pursuant to a broker-assisted cashless exercise, by delivery of other shares of Synopsys common stock, pursuant to a net exercise arrangement, or in any other form of legal consideration reasonably acceptable to our Board of Directors.

**Vesting.** Stock options granted under the 2006 Employee Plan vest, or become exercisable, as determined by our Board of Directors. Vesting typically occurs during the optionholder’s continued service with Synopsys or an affiliate, whether such service is in the capacity of an employee, director or consultant (collectively referred to as service) and regardless of any change in the capacity of the optionholder, or upon achievement of quantitative or qualitative goals determined by the plan administrator. Shares covered by different stock options may be subject to different vesting terms.

**Term.** Under the current 2006 Employee Plan, the maximum term of a stock option is seven years, except that in certain cases (see “Eligibility” above) the maximum term is five years.

**Termination of Service.** Stock options generally terminate three months after termination of a participant’s service unless:

- the stock option agreement by its terms specifically provides otherwise,
- termination is due to the participant’s disability, in which case the stock option may be exercised (to the extent the stock option was exercisable at the time of the termination of service) at any time within 12 months of termination,
- the participant dies before his or her service has terminated, or the participant dies within a specified period after termination of service, in which case the stock option may be exercised (to the extent the stock option was exercisable at the time of the participant’s death) within 12 months of the participant’s death by the person or persons to whom the rights to such stock option have passed, or

- the participant is terminated for cause (as defined under the 2006 Employee Plan), in which case the stock option will terminate and cease to be exercisable (whether vested or unvested) at the time of such termination.

The stock option term may be extended in the event that exercise of the stock option following termination of service is prohibited by applicable securities laws. In no event, however, may a stock option be exercised beyond the expiration of its term.

**Restrictions on Transfer.** A participant generally may not transfer a stock option other than by will, by the laws of descent and distribution, or pursuant to a domestic relations order. During the lifetime of the participant, only the participant may exercise a stock option (except in instances pursuant to a domestic relations order). A participant may also designate a beneficiary who may exercise a stock option following the participant's death.

## Terms of Restricted Stock

We may grant restricted stock awards under the 2006 Employee Plan pursuant to restricted stock award agreements adopted by our Board of Directors or a duly authorized committee. Restricted stock awards are shares of our common stock that may be subject to restrictions, such as vesting requirements.

**Consideration.** Our Board of Directors may grant restricted stock awards in consideration for past or future services rendered to Synopsys or an affiliate, or any other form of legal consideration acceptable to our Board.

**Vesting.** Shares of stock acquired under a restricted stock award may, but need not, be subject to a repurchase option in favor of Synopsys or forfeiture to Synopsys in accordance with a vesting schedule as determined by our Board of Directors.

**Termination of Service.** Upon termination of a participant's service, Synopsys may repurchase or otherwise reacquire any forfeited shares of stock that have not vested as of such termination under the terms of the applicable restricted stock award.

## Terms of Restricted Stock Units

We may grant restricted stock unit awards under the 2006 Employee Plan pursuant to restricted stock unit award agreements adopted by our Board of Directors or a duly authorized committee. Restricted stock units represent the value of a fixed number of shares of Synopsys common stock on the date of grant.

**Consideration.** Our Board of Directors may grant restricted stock units in consideration for past or future services rendered to Synopsys or an affiliate, or any other form of legal consideration acceptable to our Board.

**Vesting.** Restricted stock units vest at the rate or on the terms specified in the restricted stock unit award agreement as determined by our Board of Directors.

**Settlement.** Restricted stock units may be settled by the delivery of shares of Synopsys common stock, cash, or any combination as determined by our Board of Directors. At the time of grant, our Board of Directors may impose additional restrictions or conditions that delay the delivery of stock or cash subject to the restricted stock unit award after vesting.

**Termination of Service.** Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's termination of service.

## Terms of Stock Appreciation Rights

We may grant stock appreciation rights under the 2006 Employee Plan pursuant to stock appreciation rights agreements adopted by our Board of Directors or a duly authorized committee. A stock appreciation right is a right to receive the excess value over the strike price of a fixed number of shares. Individual stock appreciation right agreements may be more restrictive as to any or all of the permissible terms described below. Each stock appreciation right is denominated in shares of common stock equivalents but may be settled in cash.

**Term.** The maximum term of stock appreciation rights is seven years.

**Strike Price.** The strike price of stock appreciation rights may not be less than 100% of the fair market value of the common stock equivalents subject to the stock appreciation rights on the date of grant.

**Exercise.** Upon exercise of a stock appreciation right, Synopsys will pay the participant an amount equal to the excess of the aggregate fair market value on the date of exercise of a number of common stock equivalents with respect to which the participant is exercising the stock appreciation right, over the strike price determined by our Board of Directors on the date of grant. The appreciation distribution upon exercise of a stock appreciation right may be paid in cash, shares of our common stock, or any other form of consideration determined by our Board of Directors.

**Vesting.** Stock appreciation rights vest and become exercisable at the rate specified in the stock appreciation right agreement as determined by our Board of Directors.

**Termination of Service.** Stock appreciation rights generally terminate three months after termination of a participant's service unless:

- the stock appreciation rights agreement by its terms specifically provides otherwise,
- termination is due to the participant's disability, in which case the stock appreciation right may be exercised (to the extent vested at the time of the termination of service) at any time within 12 months of termination,
- the participant dies before the participant's service has terminated, or within a specified period after termination of service, in which case the stock appreciation right may be exercised (to the extent vested at the time of the participant's death) within 12 months of the participant's death by the person or persons to whom the rights to such stock appreciation right have passed, or
- the participant is terminated for cause (as defined under the 2006 Employee Plan), in which case the stock appreciation right will terminate and cease to be exercisable (whether vested or unvested) at the time of such termination.

The term of a stock appreciation right may be extended in the event that exercise following termination of service is prohibited by applicable securities laws. In no event may a stock appreciation right be exercised beyond the expiration of its term.

## **Terms of Other Stock Awards**

Our Board of Directors may grant other equity awards based in whole or in part by reference to the value of our common stock. Subject to the provisions of the 2006 Employee Plan, our Board has the authority to determine the persons to whom and the dates on which such other equity awards will be granted, the number of shares of common stock (or cash equivalents) to be subject to each award, and other terms and conditions of such awards. Such awards may be granted either alone or in addition to other equity awards granted under the 2006 Employee Plan. These awards may not have a term in excess of seven years from the date of grant.

## **Terms of Performance Awards**

**General.** Our Board of Directors may grant performance equity awards and performance cash awards that qualify as performance-based compensation that is not subject to the income tax deductibility limitations imposed by Section 162(m) of the Code, if the award is approved by the Compensation Committee and the grant or vesting of the award is tied solely to the attainment of performance goals during a designated performance period.

**Performance Goals.** To preserve the possibility that the compensation attributable to awards may qualify as performance-based compensation that will not be subject to the \$1,000,000 limitation on the income tax deductibility of the compensation paid per covered executive officer imposed under Section 162(m) of the Code, the Compensation Committee has the authority to structure one or more such awards so that stock or cash will be issued or paid pursuant to the award only upon the achievement of certain pre-established performance goals that are based on criteria that have already been approved by our stockholders. Performance goals for awards granted under the 2006 Employee

Plan may be based on any one of, or combination of, the following criteria: (a) earnings per share; (b) earnings before interest, taxes and depreciation; (c) earnings before interest, taxes, depreciation and amortization (EBITDA); (d) net earnings; (e) return on equity; (f) return on assets, investment, or capital employed; (g) operating margin; (h) gross margin; (i) operating income; (j) net income (before or after taxes); (k) net operating income; (l) net operating income after tax; (m) pre- and after-tax income; (n) pre-tax profit; (o) operating cash flow; (p) orders (including backlog) and revenue; (q) orders quality metrics; (r) increases in revenue or product revenue; (s) expenses and cost reduction goals; (t) improvement in or attainment of expense levels; (u) improvement in or attainment of working capital levels; (v) market share; (w) cash flow; (x) cash flow per share; (y) share price performance; (z) debt reduction; (aa) implementation or completion of projects or processes; (bb) customer satisfaction; (cc) stockholders' equity; (dd) quality measures; (ee) "Non-GAAP Net Income" (meaning net income excluding (1) the amortization of acquired intangible assets, (2) the impact of stock-based compensation expense, (3) acquisition-related costs, (4) other non-recurring significant items, such as the effect of tax or legal settlements with the Internal Revenue Service and restructuring charges, and (5) the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes); and (ff) to the extent that an award is not intended to comply with Section 162(m) of the Code, any other measures of performance selected by our Board of Directors. Our Board of Directors may, but is not required to, select performance goals that are consistent with Section 162(m) of Code if deductibility under Section 162(m) of the Code is desired.

Performance goals may be set on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to internally generated business plans, the performance of one or more comparable companies or the performance of one or more relevant indices. Adjustments may be made in the method of calculating the attainment of performance goals as follows: (i) to exclude restructuring and/or other nonrecurring charges (including but not limited to the effect of tax or legal settlements); (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude stock-based compensation expense determined under generally accepted accounting principles; (vi) to exclude any other unusual, infrequently occurring, non-recurring gain or loss or extraordinary item; (vii) to respond to, or in anticipation of, any unusual or extraordinary corporate item, transaction, event or development; (viii) to respond to, or in anticipation of, changes in applicable laws, regulations, accounting principles, or business conditions; (ix) to exclude the dilutive effects of acquisitions or joint ventures; (x) to assume that any business divested by Synopsys achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (xi) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common shareholders other than regular cash dividends; (xii) to reflect a corporate transaction, such as a merger, consolidation, separation (including a spinoff or other distribution of stock or property by a corporation), or reorganization (whether or not such reorganization comes within the definition of such term in Section 368 of the Code); (xiii) to reflect any partial or complete corporate liquidation; (xiv) to exclude the effect of in-process research and development expenses; and (xv) to exclude the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes.

**Annual Limitation.** The maximum benefit to be granted to a participant in any calendar year attributable to performance equity awards may not exceed 1,000,000 shares of common stock. The maximum benefit to be granted to a participant in any calendar year attributable to performance cash awards granted pursuant to the amended 2006 Employee Plan may not exceed \$4,000,000.

***Stockholder approval of this Proposal 2 will also constitute a re-approval of the foregoing performance criteria, permitted adjustments for calculating performance goal attainment, and annual limitations on performance award grants for purposes of Section 162(m) of the Code.***

## **Changes to Capital Structure**

In the event any change is made to the outstanding shares of our common stock without receipt of consideration (whether through a stock split, reverse stock split or other changes in the capital structure), appropriate adjustments will be made to the class of securities issuable under the 2006 Employee Plan, the maximum number of securities issuable under the 2006 Employee Plan, the incentive stock option limitation, the maximum award that one person may be granted in a calendar year under the 2006 Employee Plan, and the number, class and price per share under outstanding equity awards under the 2006 Employee Plan.

## **Corporate Transactions; Changes in Control**

Unless otherwise provided in a written agreement between Synopsys or an affiliate and a participant, or unless otherwise expressly provided by our Board of Directors or Compensation Committee at the time of grant of an equity award, in the event of significant corporate transactions, outstanding equity awards under the 2006 Employee Plan may be assumed, continued or substituted by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute such equity awards, then:

- with respect to any such equity awards that are held by individuals then performing services for Synopsys or its affiliates, the vesting and exercisability provisions of such equity awards will be accelerated in full and such awards will be terminated if not exercised prior to the effective date of the corporate transaction and any reacquisition or repurchase rights will lapse (contingent upon the effectiveness of the corporate transaction),
- all other outstanding equity awards will be terminated if not exercised prior to the effective date of the corporate transaction, except that certain equity awards, such as restricted stock awards, may have their reacquisition or repurchase rights assigned to the surviving or acquiring entity (or its parent company) in the corporate transaction, though if such reacquisition or repurchase rights are not assigned, then such equity awards will become fully vested, and
- no vested restricted stock unit award will terminate without being settled by delivery of shares of common stock, their cash equivalent or in any other form of consideration, as determined by the Board of Directors, prior to the effectiveness of the corporate transaction.

A significant corporate transaction will be deemed to occur in the event of:

- a sale of all or substantially all of the consolidated assets of Synopsys and its subsidiaries,
- a sale of at least 90% of the outstanding securities of Synopsys,
- a merger, consolidation or similar transaction in which Synopsys is not the surviving corporation, or
- a merger, consolidation or similar transaction in which Synopsys is the surviving corporation, but shares of Synopsys outstanding common stock are converted into other property by virtue of the corporate transaction.

The 2006 Employee Plan provides, at the discretion of our Board of Directors, that the holder of an outstanding equity award that would otherwise terminate if not exercised prior to the corporate transaction may surrender such equity award in exchange for a payment equal to the excess of the value of the property that the holder would have received upon exercise of the equity award immediately prior to the corporate transaction, over the exercise price otherwise payable in connection with the equity award, which excess amount may be fully vested at the time of the corporate transaction or may be required to vest after the time of the corporate transaction substantially in accordance with the schedule in effect immediately prior to the corporate transaction. Additionally, the 2006 Employee Plan provides our Board of Directors with the discretion to grant individual equity awards that vest as to all or any portion of the shares subject to the equity award in connection with a change of control transaction defined in the 2006 Employee Plan. No such equity awards have been granted by our Board of Directors.

The acceleration of an equity award in the event of an acquisition or similar corporate event may be viewed as an anti-takeover provision, which may have the effect of discouraging a proposal to acquire or otherwise obtain control of Synopsys.

### **Duration, Termination and Amendment**

Our Board of Directors may suspend or terminate the 2006 Employee Plan without stockholder approval or ratification at any time. The 2006 Employee Plan will expire on April 1, 2026, unless terminated sooner by our Board. Our Board may amend or modify the 2006 Employee Plan at any time, subject to any required stockholder approval. To the extent required by applicable law or regulation, stockholder approval will be required for any amendment that:

- materially increases the number of shares available for issuance under the 2006 Employee Plan,
- materially expands the class of individuals eligible to receive awards under the 2006 Employee Plan,
- materially increases the benefits accruing to the participants under the 2006 Employee Plan or materially reduces the price at which shares of common stock may be issued or purchased under the 2006 Employee Plan,
- materially extends the term of the 2006 Employee Plan, or
- expands the types of awards available for issuance under the 2006 Employee Plan.

Our Board of Directors also may submit to stockholders any other amendment to the 2006 Employee Plan, including amendments intended to satisfy the requirements of Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limitation on the deductibility of compensation paid to certain employees.

### **U.S. Federal Income Tax Information**

The following is a summary of the principal United States federal income taxation consequences to participants and Synopsys with respect to participation in the 2006 Employee Plan. This summary is not intended to be exhaustive, and does not discuss the income tax laws of any city, state or foreign jurisdiction in which a participant may reside.

**Incentive Stock Options.** Incentive stock options granted under the 2006 Employee Plan are intended to qualify for the favorable federal income tax treatment accorded “incentive stock options” under the Code. There generally are no federal ordinary income tax consequences to the participant or Synopsys by reason of the grant or exercise of an incentive stock option. However, the exercise of an incentive stock option may increase the participant’s alternative minimum tax liability, if any.

The excess, if any, of the fair market value of the incentive stock option shares on the date of exercise over the exercise price is an adjustment to income for purposes of the alternative minimum tax. Alternative minimum taxable income is determined by adjusting regular taxable income for certain items, increasing that income by certain tax preference items and reducing this amount by the applicable exemption amount.

If a participant holds stock acquired through exercise of an incentive stock option for more than two years from the date on which the stock option was granted and more than one year after the date the stock option was exercised for those shares, any gain or loss on a disposition of those shares (referred to in this Proxy Statement as a qualifying disposition) will be a long-term capital gain or loss. Upon such a qualifying disposition, Synopsys will not be entitled to any income tax deduction.

Generally, if the participant disposes of the stock before the expiration of either of those holding periods (referred to in this Proxy Statement as a disqualifying disposition), then at the time of disposition the participant will realize taxable ordinary income equal to the lesser of (a) the excess of the stock’s fair market value on the date of exercise over the exercise price, or (b) the participant’s actual gain, if any, on the purchase and sale. The participant’s additional gain or any loss upon the disqualifying disposition will be a capital gain or loss, which will be long-term or short-term depending on whether the stock was held for more than one year after exercise.

To the extent the participant recognizes ordinary income by reason of a disqualifying disposition, generally Synopsys will be entitled (subject to the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation) to a corresponding income tax deduction in the tax year in which the disqualifying disposition occurs.

**Non-Statutory Stock Options.** No taxable income is generally recognized by a participant upon the grant or vesting of a non-statutory stock option under the 2006 Employee Plan. Upon exercise of a non-statutory stock option, the participant will recognize ordinary income equal to the excess, if any, of the fair market value of the purchased shares on the exercise date over the exercise price paid for those shares. Generally, we will be entitled to a corresponding income tax deduction in the tax year in which such ordinary income is recognized by the participant.

Upon disposition of the common stock, the participant will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such common stock plus any amount recognized as ordinary income upon acquisition of the stock. Such gain or loss will be long-term or short-term depending on whether the common stock was held for more than one year.

Stock appreciation rights are generally taxed in a manner similar to non-statutory stock options.

**Restricted Stock Awards.** Upon the grant of a restricted stock award which is unvested and subject to reacquisition by Synopsys in the event of the participant's termination of service prior to vesting in those shares, the participant will not recognize any taxable income at the time of issuance, but will have to report as ordinary income, as and when our reacquisition right lapses, an amount equal to the fair market value of the shares on the dates the reacquisition right lapses. The participant may, however, elect under Section 83(b) of the Code to include as ordinary income in the year of issuance an amount equal to the fair market value of the shares on the date of issuance. If the Section 83(b) election is made, the participant will not recognize any additional income as and when the reacquisition right lapses. We will be entitled to a corresponding income tax deduction in the tax year in which such ordinary income is recognized by the participant.

Upon disposition of the common stock acquired upon the receipt of a restricted stock award, the participant will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such common stock plus any amount previously recognized as ordinary income in respect of such common stock. Such gain or loss will be long-term or short-term depending on whether the common stock was held for more than one year.

**Restricted Stock Unit Awards.** No taxable income is generally recognized upon receipt of a restricted stock unit award under the 2006 Employee Plan. In general, the participant will recognize ordinary income in the year in which the shares to be issued in respect of that unit are issued in an amount equal to the fair market value of the shares on the issuance date. We will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the participant. In general, the deduction will be allowed for the taxable year in which such ordinary income is recognized by the participant.

**Potential Limitation on Deductions.** Section 162(m) of the Code denies a deduction to any publicly held corporation for compensation paid to certain "covered employees" in a taxable year to the extent that compensation to each covered employee exceeds \$1,000,000. It is possible that compensation attributable to awards, when combined with all other types of compensation received by a covered employee from Synopsys, may cause this limitation to be exceeded in any particular year. However, certain kinds of compensation, including qualified "performance-based compensation", are disregarded for purposes of the deduction limitation.

Below is a summary of the material conditions under which certain equity awards qualify as performance-based compensation that is exempt from the \$1,000,000 deduction limitation in accordance with Section 162(m) of the Code:

- **Stock Options and Stock Appreciation Rights.** Compensation paid to covered employees that is attributable to stock options and stock appreciation rights will qualify as performance-based compensation if (a) such awards are granted by a compensation committee or committee of our Board of Directors comprised solely of "outside directors," (b) the 2006 Employee Plan contains a per-employee limitation on the number of shares

for which such awards may be granted during a specified period, (c) the per-employee limitation is approved by our stockholders, and (d) the exercise or strike price of the award is no less than the fair market value of the stock on the date of grant.

- ***Restricted Stock Awards, Restricted Stock Unit Awards, Performance Equity Awards and Performance Cash Awards.*** Compensation paid to covered employees that is attributable to restricted stock awards, restricted stock unit awards, performance equity awards, and performance cash awards will qualify as performance-based compensation, provided that (a) the award is granted by a compensation committee comprised solely of “outside directors,” (b) the award is granted (or vests) only upon the achievement of an objective performance goal established in writing by the compensation committee while the outcome is substantially uncertain, (c) the compensation committee certifies in writing prior to the grant or vesting of the award that the performance goal has been satisfied, and (d) stockholders have approved the material terms of the award (including the class of employees eligible for such award, the business criteria on which the performance goal is based, and the maximum amount, or formula used to calculate the amount, payable upon attainment of the performance goal).

## **Proposal 3 – Approval of our 2017 Non-Employee Directors Equity Incentive Plan**

In February 2017, our Board of Directors approved and adopted our 2017 Non-Employee Directors Equity Incentive Plan, subject to the approval of our stockholders at the Annual Meeting. We believe that the 2017 Directors Plan will assist us in attracting and retaining exceptional candidates to serve as independent directors on our Board.

Our stockholders previously approved our 2005 Non-Employee Directors Equity Incentive Plan, as amended, which automatically grants equity awards to our non-employee directors. If our stockholders approve the 2017 Directors Plan, the 2005 Directors Plan will terminate as of the date of the Annual Meeting and no awards will be granted under the 2005 Directors Plan on or after the date of the Annual Meeting. If our stockholders do not approve the 2017 Directors Plan, then the 2017 Directors Plan will not become effective, no awards will be granted under the 2017 Directors Plan and the 2005 Directors Plan will continue in accordance with its terms as previously approved by our stockholders.

Approval of the 2017 Directors Plan requires the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting, and voting on this Proposal 3, to vote “For” this Proposal 3. Abstentions and broker non-votes will not be counted as either votes cast “For” or “Against” this Proposal 3 and have no effect on the vote for this Proposal 3.

**Our Board of Directors Recommends that You Vote FOR the Approval of the 2017 Non-Employee Directors Equity Incentive Plan**

### **Purpose and Background**

The 2017 Directors Plan authorizes the Board to provide equity-based compensation in the form of non-statutory stock options, restricted stock awards or restricted stock unit awards (collectively referred to in this Proposal 3 as the Stock Awards). We utilize these Stock Awards primarily to encourage our non-employee directors to own our stock, align our non-employee directors’ interests with those of our stockholders, provide our non-employee directors with a meaningful interest in the attainment of our financial goals, and provide financial incentives that will help attract and retain the most qualified non-employee directors. Some of the key features of the 2017 Directors Plan that reflect our commitment to effective management of equity and incentive compensation are set forth below.

We believe our future success depends in part on our ability to attract, motivate and retain highly qualified non-employee directors. The ability to provide equity-based awards under the 2017 Directors Plan is a critical component to achieving this success. We would be at a distinct competitive disadvantage if we could not use equity-based awards that are aligned with our peer group companies to recruit, motivate and retain non-employee directors. We also believe that equity compensation motivates non-employee directors to appropriately focus on actions that enhance stockholder value because they will share in that value enhancement through improved share price performance.

Currently, eight of our ten director nominees are non-employee directors eligible to participate in the 2017 Directors Plan. Other than the 2005 Directors Plan, which will terminate if our stockholders approve the 2017 Directors Plan, non-employee directors are not eligible to receive equity awards under any of our other equity compensation plans or those of any of our affiliates.

Please see the section entitled “New Plan Benefits and Historical Grant Information” on page 22 for a summary of our historical equity compensation practices and burn rates for all of our equity plans. If our stockholders approve the 2017 Directors Plan, the 2005 Directors Plan will terminate as of the date of the Annual Meeting, and any shares remaining available for grant under our 2005 Directors Plan will not be eligible for issuance under the 2005 Directors Plan or the 2017 Directors Plan. Then-outstanding awards under the 2005 Directors Plan will remain outstanding in accordance with their terms and conditions.

## Important Features of the 2017 Directors Plan

The 2017 Directors Plan includes provisions that are designed to protect our stockholders' interests and to reflect corporate governance best practices, including:

- **Stockholder approval required for additional shares.** The 2017 Directors Plan does not contain an annual "evergreen" provision that provides for automatic increases of shares on an ongoing basis. The 2017 Directors Plan instead authorizes a fixed number of shares, and stockholder approval is required for any increase in the number of shares.
- **Award size limits.** The 2017 Directors Plan limits the aggregate value of Initial Awards, Annual Awards and Interim Awards (each as defined below) received in any one calendar year to \$750,000, \$500,000 and \$458,333, respectively. The actual amounts approved by our Board for fiscal 2017 are described on page 19 under "Fiscal 2017 Compensation."
- **No discounted stock options.** The 2017 Directors Plan requires that all stock options must have an exercise price equal to or greater than the fair market value of our common stock on the date of grant.
- **Repricing not allowed.** The 2017 Directors Plan expressly prohibits the repricing of equity awards—including the cancellation and re-grant of outstanding underwater equity awards—without prior stockholder approval.
- **No liberal share recycling.** In general, when awards lapse or are cancelled, the shares reserved for those awards are returned to the share reserve of the 2017 Directors Plan and become available for future awards. However, shares of common stock that are tendered to Synopsys in payment of the exercise or purchase price of an award or that are withheld to cover tax withholding obligations are not returned to our share reserve.
- **Seven-Year Term.** All stock options granted under the 2017 Directors Plan have a term of no more than seven years.

## Description of 2017 Directors Plan

The material terms and provisions of the 2017 Directors Plan are summarized below. This summary, however, does not purport to be a complete description of the 2017 Directors Plan, and is qualified entirely by reference to the complete text of the 2017 Directors Plan, a copy of which is included as an appendix to this Proxy Statement. Any stockholder that wishes to obtain a paper copy of the plan document may do so by written request to: Corporate Secretary, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043.

## Administration

Our Board has the authority to construe and interpret the 2017 Directors Plan and the Stock Awards granted under it, and to establish rules for its administration.

## Eligibility

Participation in the 2017 Directors Plan is limited to non-employee members of our Board who are elected or appointed to our Board. Currently, eight of our ten director nominees are non-employee directors eligible to participate in the 2017 Directors Plan. Non-employee directors are not eligible to receive equity awards under any of our other equity compensation plans or those of any of our affiliates.

## Stock Subject to the 2017 Directors Plan

An aggregate of 450,000 shares of our common stock are authorized for issuance under the 2017 Directors Plan. As of February 10, 2017, no Stock Awards has been granted under the 2017 Directors Plan and 450,000 shares were available for future grants. If a Stock Award granted under the 2017 Directors Plan fails to vest, expires or terminates without having been fully exercised or vested, the unvested, expired or forfeited shares of common stock subject to such Stock Award become available

for subsequent issuance under the 2017 Directors Plan. However, if the exercise price or purchase price of a Stock Award, or the taxes due in respect of a Stock Award, are paid by tendering back to Synopsys (or having Synopsys withhold from issuance) shares of common stock from the shares otherwise issuable under the Stock Award, then such tendered or withheld shares will be deemed issued and will not be available for subsequent issuance under the 2017 Directors Plan.

## **Grant of Stock Awards**

The 2017 Directors Plan provides for the automatic grant of Stock Awards to non-employee members of our Board over their period of service on our Board as Initial Awards, Interim Awards (if an individual is appointed to our Board during an interim period) and Annual Awards, the form and size of which, subject to limitations set forth below, are determined by the Board each year. Such Initial Awards, Interim Awards and Annual Awards may be granted in the form of non-statutory stock options, restricted stock awards and/or restricted stock unit awards, and the vesting provisions of such Stock Awards may vary, in the Board's sole discretion. Generally, the Board will determine the form and size of such Stock Awards on or prior to December 31 of each year for Stock Awards to be made in the following calendar year. However, the form and size of Stock Awards to be granted in calendar year 2017 was determined on the date the Board approved the 2017 Directors Plan. If no new determination is made by December 31 for the following year, Stock Awards granted in the following year will be in the same form and size approved for the most recent year.

**Initial Awards.** Each non-employee member of our Board who is first elected or appointed automatically receives a Stock Award or Stock Awards (referred to in this Proposal 3 as the Initial Award) in a dollar amount approved by the Board, subject to limitations set forth below.

**Interim Awards.** Each non-employee director who is appointed to our Board on a date that is (1) not the date of an annual meeting of stockholders and (2) less than 11 months since the most recent annual meeting of stockholders, automatically receives, in addition to the Initial Award described above, a Stock Award or Stock Awards (referred to in this Proposal 3 as the Interim Award) at the time of his or her initial appointment to our Board with a value equal to (1) the value of the Annual Award that such non-employee director would have received if he or she had been appointed to our Board at the most recent annual meeting of stockholders, but (2) reduced on a pro-rata basis for each month prior to the grant date during which that person did not serve on our Board at any time during such month.

**Annual Awards.** On the date of each annual meeting of stockholders, each non-employee member of our Board who is elected (whether for the first time or through re-election) to our Board at such annual meeting is automatically granted a Stock Award or Stock Awards (referred to in this Proposal 3 as the Annual Award) in a dollar amount approved by the Board, subject to limitations set forth below. The date of grant for Annual Awards granted at the 2017 Annual Meeting of Stockholders will be the date of the Annual Meeting or the first day thereafter on which a registration statement on Form S-8 has become effective.

## **Award Size Limits**

In any single calendar year, each non-employee director may not receive Initial Awards with an aggregate value in excess of \$750,000, Annual Awards with an aggregate value in excess of \$500,000 or Interim Awards with an aggregate value in excess of \$458,333. For purposes of determining aggregate award value, stock options are valued as determined for accounting purposes on the date of grant under the generally accepted accounting principles adopted by Synopsys for purposes of preparing our financial statements and/or public reporting under Item 402 of Regulation S-K. Restricted stock or restricted stock units are valued by multiplying the number of shares subject to such award by the Fair Market Value (as defined in the 2017 Directors Plan) on the date of grant.

## **Terms of Stock Options**

**Exercise Price.** The exercise price of stock options granted under the 2017 Directors Plan is 100% of the Fair Market Value of our common stock on the grant date.

As of February 10, 2017, the closing price of our common stock as reported on the NASDAQ Global Select Market was \$65.29 per share.

**Consideration.** The exercise price of stock options granted under the 2017 Directors Plan may be paid, to the extent permitted by applicable law and the stock option agreement, in (1) cash or check, (2) by delivery of other shares of our common stock, (3) pursuant to a broker-assisted cashless exercise arrangement, or (4) pursuant to a net exercise arrangement.

**Vesting.** Stock options granted under the 2017 Directors Plan generally vest and become exercisable in periodic installments, as determined by our Board. The vesting provisions of individual options may vary. If a non-employee director's service on our Board terminates due to permanent disability or death, the option may be exercised for an additional number of shares in which the director would have vested had he or she continued in Board service until the next annual meeting of stockholders.

**Term.** The maximum term of options granted under the 2017 Directors Plan is seven years.

**Termination of Service.** If a non-employee director's service on our Board terminates, options granted under the 2017 Directors Plan generally terminate six months after termination of Board service, unless (1) termination from our Board is due to an individual's permanent disability, in which case the option, to the extent vested at the date of termination, may be exercised for 12 months following termination, (2) an individual dies while serving on our Board or at any time within six months following termination of service on our Board, in which case the option, to the extent vested at the date of termination, may be exercised for 12 months following the date of death by the person or persons to whom the rights to exercise such option have passed, (3) issuance of the underlying shares would violate Securities Act registration requirements at any time during the post-termination exercise period, in which case the option may be exercised for six months following the date that such issuance would not violate Securities Act registration requirements, or (4) sale of the exercised option shares would violate our insider trading policy at any time during the post-termination exercise period, in which case the option may be exercised for six months following the date that such sale of exercised shares would not violate our insider trading policy. In no event, however, may an option be exercised beyond the expiration of its term.

**Restrictions on Transfer.** Options granted under the 2017 Directors Plan may not be transferred except by will or the laws of descent and distribution or as otherwise set forth in the applicable stock option agreement.

**Repricing Not Allowed.** The 2017 Directors Plan expressly prohibits our Board from approving any option re-pricing program under the 2017 Directors Plan whereby stock options are surrendered in exchange for any new Stock Awards with a lower exercise or purchase price, without first obtaining stockholder approval of such program. However, this restriction does not include a prohibition on pro-rata adjustments to reflect stock splits and other similar corporate events.

## **Terms of Restricted Stock Awards or Restricted Stock Units**

**Consideration.** Awards of restricted stock or restricted stock units are granted under the 2017 Directors Plan in consideration for past or future services rendered to Synopsys.

**Issuance of Shares.** Shares underlying awards of restricted stock granted under the 2017 Directors Plan are issued immediately upon grant, while shares underlying awards of restricted stock units granted under the 2017 Directors Plan are issued upon vesting of the award, or upon a later specified date or event as determined by the Board.

**Vesting.** Awards of restricted stock or restricted stock units granted under the 2017 Directors Plan generally vest in periodic installments, as determined by our Board. The vesting provisions of such awards may vary. If a non-employee director's service on our Board terminates due to permanent disability or death, the award vests on an accelerated basis for that additional number of shares in which the participant would have vested had he or she continued in Board service until the next annual meeting of stockholders.

**Termination of Service.** Upon termination of a non-employee director's service on our Board, any unvested shares underlying restricted stock or restricted stock units that have not vested as of the date of such termination are immediately forfeited back to Synopsys.

**Restrictions on Transfer.** Awards of restricted stock or restricted stock units granted under the 2017 Directors Plan may not be transferred except as set forth in the applicable restricted stock agreement or stock unit award agreement.

### **Changes to Capital Structure**

If any change is made to the outstanding shares of our common stock without our receipt of consideration (whether through a stock split or other specified change in our capital structure), appropriate adjustments will be made to (1) the maximum number and/or class of securities issuable under the 2017 Directors Plan, (2) the number and/or class of securities for which Stock Awards are to be subsequently made to both new and continuing non-employee directors, and (3) the number and/or class of securities and the exercise price per share in effect under each outstanding Stock Award under the 2017 Directors Plan. These adjustments are intended to prevent the dilution or enlargement of benefits for participants.

### **Changes in Control**

In the event of a change in control, each Stock Award under the 2017 Directors Plan will automatically vest as to all shares subject to the Stock Award immediately prior to the effective date of the change in control. We believe this acceleration benefit is consistent with the vesting provisions of our peer companies and is appropriate because it allows the directors to focus on the best interests of our stockholders in considering a transaction without concern for their continued service following the change in control. For purposes of the 2017 Directors Plan, a change in control will be deemed to occur in the event there is (1) the successful completion of a tender or exchange offer for securities possessing more than 50% of the total combined voting power of our outstanding securities, (2) a change in the majority of our Board without the approval of the incumbent directors or their approved successors over a period of twenty-four (24) consecutive months or less, or (3) the consummation of a sale, lease, exclusive license or other disposition of all or substantially all of the consolidation assets of Synopsys and its subsidiaries. In the event an outstanding stock option is not assumed by or assigned to the successor corporation or its parent corporation in connection with the change in control, such stock option will terminate and cease to remain outstanding if not exercised prior to the effective date of the change in control.

### **Duration, Termination and Amendment**

Our Board may suspend or terminate the 2017 Directors Plan without stockholder approval or ratification at any time. Unless terminated sooner, the 2017 Directors Plan is scheduled to terminate on the earlier of (1) the day immediately prior to the date of our 2027 Annual Meeting of Stockholders, or (2) the date on which all shares available for issuance under the 2017 Directors Plan have been issued or cancelled pursuant to the exercise of Stock Awards.

Our Board may amend or modify the 2017 Directors Plan at any time, subject to any required stockholder approval. Stockholder approval is required for any amendment that would (1) modify the requirements as to eligibility for participation to the extent such modification requires stockholder approval in order to comply with Rule 16b-3 of the Exchange Act or any securities exchange listing requirements, (2) increase the number of shares reserved for issuance under the 2017 Directors Plan, or (3) materially change any other provision of the 2017 Directors Plan if such change requires stockholder approval in order to comply with Rule 16b-3 of the Exchange Act or any securities exchange listing requirements.

## New Plan Benefits

### Awards to be Granted to Certain Individuals and Groups under the 2017 Directors Plan

The following table shows, for each of our named executive officers and the various groups indicated, the number of shares of common stock underlying awards of restricted stock and stock options that we expect will be granted under the 2017 Directors Plan during fiscal 2017.

Name	Restricted Stock Awards	
	Dollar Value (\$)	Number of Awards #(3)
<b>Aart J. de Geus</b> Co-Chief Executive Officer and Chairman of the Board of Directors	—	—
<b>Chi-Foon Chan</b> Co-Chief Executive Officer and President	—	—
<b>Trac Pham</b> Chief Financial Officer	—	—
<b>Brian M. Beattie</b> Executive Vice President, Business Operations and Chief Administrative Officer	—	—
<b>Joseph W. Logan</b> Executive Vice President, Worldwide Sales and Corporate Marketing	—	—
<b>John F. Runkel, Jr.</b> General Counsel and Corporate Secretary	—	—
All executive officers as a group (6 persons)(1)	—	—
All directors who are not executive officers as a group (8 persons)(2)	\$1,399,816	21,440
All employees, excluding executive officers, as a group(1)	—	—

(1) Employees, including executive officers, are not eligible to participate in the 2017 Directors Plan.

(2) In February 2017, the Board approved the terms of the annual grants of restricted stock to be made to our non-employee directors under the 2017 Director Plan, subject to stockholder approval of the 2017 Director Plan. If our stockholders do not approve the 2017 Directors Plan, then the 2017 Directors Plan will not become effective, no awards will be granted under the 2017 Directors Plan. In that case, the 2005 Directors Plan will continue, and the non-employee directors will receive their annual grants under the 2005 Plan, in accordance with its terms of such plan as previously approved by our stockholders.

(3) Share calculations are based on the Company's closing price as of February 10, 2017.

### U.S. Federal Income Tax Information

The following is a summary of the principal U.S. federal income taxation consequences to non-employee directors and Synopsys with respect to participation in the 2017 Directors Plan. This summary is not intended to be exhaustive, and does not discuss the income tax laws of any city, state or foreign jurisdiction in which a participant may reside.

**Non-Statutory Stock Options.** No taxable income is generally recognized by a participant upon the grant or vesting of a non-statutory stock option under the 2017 Directors Plan. Upon exercise of a non-statutory stock option, the participant will recognize ordinary income equal to the excess, if any, of the fair market value of the purchased shares on the exercise date over the exercise price paid for those shares. Generally, we will be entitled to a corresponding income tax deduction in the tax year in which such ordinary income is recognized by the participant.

Upon disposition of the common stock, the participant will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such common stock plus any amount recognized as ordinary income upon acquisition of the stock. Such gain or loss will be long-term or short-term depending on whether the common stock was held for more than one year.

**Restricted Stock Awards.** Upon the grant of a restricted stock award which is unvested and subject to reacquisition by Synopsys in the event of the participant's termination of service prior to vesting in those shares, the participant will not recognize any taxable income at the time of issuance, but will

have to report as ordinary income, as and when our reacquisition right lapses, an amount equal to the fair market value of the shares on the dates the reacquisition right lapses. The participant may, however, elect under Section 83(b) of the Code to include as ordinary income in the year of issuance an amount equal to the fair market value of the shares on the date of issuance. If the Section 83(b) election is made, the participant will not recognize any additional income as and when the reacquisition right lapses. We will be entitled to a corresponding income tax deduction in the tax year in which such ordinary income is recognized by the participant.

Upon disposition of the common stock acquired upon the receipt of a restricted stock award, the participant will recognize a capital gain or loss equal to the difference between the selling price and the sum of the amount paid for such common stock plus any amount previously recognized as ordinary income in respect of such common stock. Such gain or loss will be long-term or short-term depending on whether the common stock was held for more than one year.

**Restricted Stock Unit Awards.** No taxable income is generally recognized upon receipt of a restricted stock unit award under the 2017 Directors Plan. In general, the participant will recognize ordinary income in the year in which the shares to be issued in respect of that unit are issued in an amount equal to the fair market value of the shares on the issuance date. We will be entitled to an income tax deduction equal to the amount of ordinary income recognized by the participant. In general, the deduction will be allowed for the taxable year in which such ordinary income is recognized by the participant.

## Proposal 4 – Advisory Vote to Approve Frequency of an Advisory Vote on Executive Compensation

We are requesting our stockholders to advise on how frequently we should seek an advisory vote on the compensation of our named executive officers, commonly referred to as a “say-on-pay” vote. Proposal 5 in this Proxy Statement is a say-on-pay vote.

The advisory vote in this Proposal 4 is often referred to as a “say-on-frequency” vote. For this Proposal 4, you may vote on whether you would prefer to have a say-on-pay vote every year, every 2 years or every 3 years. Broker non-votes will have no effect on the vote for this Proposal 4.

### **Our Board of Directors Recommends that You Vote for a “1 Year” Frequency for Future Advisory Votes on Executive Compensation**

For our first say-on-frequency vote at our 2011 Annual Meeting of Stockholders, our Board of Directors recommended an annual say-on-pay vote and our stockholders concurred, casting a majority of their votes in favor of a one-year frequency. We have held a say-on-pay vote for each of the past five years accordingly.

Our Board of Directors continues to believe that say-on-pay advisory votes should be conducted every year. An annual advisory vote on executive compensation allows our stockholders to provide input on our compensation philosophy, policies and practices as disclosed in our proxy statement every year.

You may cast your vote on your preferred voting frequency by choosing 1 year, 2 years or 3 years, or you may abstain from voting, when you vote in response to the following resolution:

**“RESOLVED**, that the option of 1 year, 2 years, or 3 years that receives the highest number of votes cast for this resolution will be determined to be the preferred frequency with which Synopsys, Inc. is to hold a stockholder vote to approve the compensation of the named executive officers, as disclosed pursuant to the Securities and Exchange Commission’s compensation disclosure rules (including the Compensation Discussion and Analysis, compensation tables and narrative discussion).”

You are not voting to approve or disapprove our Board of Directors’ recommendation.

While this advisory say-on-frequency vote is non-binding, our Board of Directors and Compensation Committee will give careful consideration to the choice that receives the most votes when considering the frequency of future say-on-pay votes. We will announce our decision regarding the frequency of future say-on-pay votes on a Current Report on Form 8-K we file with the Securities and Exchange Commission announcing the final voting results of the Annual Meeting or an amendment thereto.

We expect that our next vote on the advisory say-on-frequency proposal will occur at our 2023 Annual meeting of Stockholders.

## Proposal 5 – Advisory Vote to Approve Executive Compensation

We are requesting our stockholders to provide advisory approval of the compensation of our named executive officers as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the narrative discussion set forth on pages 44 to 63 of this Proxy Statement. This non-binding advisory vote is commonly referred to as a “say-on-pay” vote.

**Our Board of Directors Recommends that You Vote FOR the Compensation of Our Named Executive Officers As Disclosed in this Proxy Statement**

### Background

At last year’s annual meeting, we provided our stockholders with the opportunity to cast an advisory vote regarding the compensation of our named executive officers as disclosed in the proxy statement for the 2016 Annual Meeting of Stockholders. At our 2016 Annual Meeting, our stockholders overwhelmingly approved the proposal, with approximately 95% of voted shares in favor of the proposal.

We have held a stockholder say-on-pay vote annually, as elected by our Board of Directors and consistent with a past advisory vote by our stockholders. This year, in Proposal 4, we are asking our stockholders to again cast an advisory vote on the frequency of our say-on-pay votes. In the meantime, we are also holding an annual say-on-pay vote in this Proposal 5 and are asking our stockholders to vote “For” the compensation of our named executive officers as disclosed in this Proxy Statement.

Our Compensation Committee, which is responsible for designing and administering our executive compensation program, has designed our executive compensation program to provide a competitive and internally equitable compensation and benefits package that reflects company performance, job complexity and the value provided, while also promoting long-term retention, motivation and alignment with the long-term interests of Synopsys’ stockholders. Synopsys has maintained profitability and increased revenue each year since fiscal 2006, and we believe the compensation program for our named executive officers has been instrumental in helping Synopsys achieve strong financial performance in the challenging macroeconomic environment over the past few years.

We encourage you to carefully review the “Compensation Discussion and Analysis” beginning on page 44 of this Proxy Statement for additional details on Synopsys’ executive compensation, including Synopsys’ compensation philosophy and objectives, as well as the processes our Compensation Committee used to determine the structure and amounts of the compensation of our named executive officers.

We are asking you to indicate your support for the compensation of our named executive officers as described in this Proxy Statement. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement. Accordingly, we are asking you to vote, on an advisory basis, “For” the following resolution at the Annual Meeting:

**“RESOLVED**, that the compensation paid to Synopsys, Inc.’s named executive officers, as disclosed pursuant to the Securities and Exchange Commission’s compensation disclosure rules, including the Compensation Discussion and Analysis, compensation tables and narrative discussion set forth on pages 44 to 63 of this Proxy Statement, is hereby approved.”

This advisory resolution will be approved if the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting, and voting on this Proposal 5, vote “For” this Proposal 5. Abstentions and broker non-votes will not be counted as either votes cast “For” or “Against” this Proposal 5 and have no effect on the vote for this Proposal 5.

While the results of this advisory vote are not binding, the Compensation Committee will consider the outcome of the vote in making future compensation decisions for named executive officers.

# Compensation Discussion and Analysis

This section discusses the compensation of our named executive officers (NEOs).

## Fiscal 2016 NEOs

Aart J. de Geus	Co-Chief Executive Officer and Chairman of the Board of Directors
Chi-Foon Chan	Co-Chief Executive Officer and President
Trac Pham	Chief Financial Officer
Brian M. Beattie	Executive Vice President, Business Operations and Chief Administrative Officer
Joseph W. Logan	Executive Vice President, Worldwide Sales and Corporate Marketing
John F. Runkel, Jr.	General Counsel and Corporate Secretary

We are led by Dr. Aart J. de Geus and Dr. Chi-Foon Chan, our Co-Chief Executive Officers. Dr. de Geus is an electronic design automation (EDA) pioneer who co-founded Synopsys more than 30 years ago. Dr. de Geus has long been considered one of the world's leading experts on logic synthesis and simulation, and over the years, has been widely recognized for his technical, business and community achievements by leading organizations throughout the world. Dr. Chan has been with Synopsys for more than 26 years. Over the years, Dr. Chan pioneered many aspects of Synopsys including the initiation of our intellectual property (IP) business, and more recently, leading our global expansion efforts in Asia.

We believe we continue to benefit from our Co-CEO structure. This structure enables both Dr. de Geus and Dr. Chan to speak with the authority of a CEO as they guide our product innovations across various fields and support our relationships with key customers. Both Dr. de Geus and Dr. Chan have extensive knowledge of our products, customers, and industry while providing different strengths. Dr. Chan contributes expertise in the day-to-day operations of our business, while Dr. de Geus leads us in developing and communicating our long-term vision. We rely on the expertise of Dr. de Geus, Dr. Chan and our other NEOs to assist us in growing our business and building stockholder value, with stockholder value steadily increasing since the Co-CEO structure was established in fiscal 2013.

## Executive Summary

### Fiscal 2016 Business Performance Overview

We achieved outstanding financial results in fiscal 2016 across our diverse products and services groups. We continued making steady progress on customer adoption of our next-generation of chip design and verification tools that enable innovators across a variety of markets to develop smart and secure products and applications. We strengthened our IP portfolio with new, advanced solutions that address specific application requirements for the mobile, automotive, digital home, Internet of Things (IoT), and cloud computing markets, in order to enable designers to quickly develop system-on-chips (SoCs) in these areas. At the same time, we expanded our software integrity portfolio by offering new and enhanced software quality and security testing solution that help companies reduce the risk of defects and vulnerabilities in development, and across the software supply chain before their software is released. We also completed several acquisitions during the year to bolster our product and service offerings in the core EDA and IP, systems and software integrity space. In fiscal 2016:

- Total revenue increased by approximately 8% over fiscal 2015.
- Net income increased by approximately 7% over fiscal 2015 on a non-GAAP basis and approximately 18% over fiscal 2015 on a GAAP basis.
- Net income per share (diluted) increased by approximately 9% over fiscal 2015 on a non-GAAP basis and approximately 21% over fiscal 2015 on a GAAP basis.

- We generated approximately \$587 million in operating cash flow and increased our share repurchases to \$400 million.

We entered fiscal 2017 with a backlog of approximately \$3.5 billion, which represents committed orders that we expect to recognize as revenue over the next three years.

## **Fiscal 2016 Executive Compensation Overview**

The cornerstone of our compensation philosophy is *pay-for-performance*. We closely align the compensation paid to our NEOs with achievement of both near- and long-term financial goals. In fiscal 2016, we structured our compensation mix such that approximately 90% of the target compensation of Dr. de Geus and Dr. Chan, our Co-CEOs, was performance-based and approximately 79% of the target compensation of our other NEOs, as a group, was performance-based.

Our NEOs receive a salary, equity awards, and cash incentive opportunity under our Executive Incentive Plan (EIP), each determined by the Compensation Committee. The equity awards consist of stock options and performance-based restricted stock units (PRSUs). The performance goals for our EIP and PRSUs support our primary financial objectives of (i) achieving profitable revenue growth and (ii) creating a stable and predictable future revenue stream. Our EIP requires a minimum average achievement of 90% of our goals before any payment can be earned, a threshold we believe is above that of our peer companies.

We performed well against our fiscal 2016 goals. As further described in the respective sections below:

- Our average achievement of our EIP revenue, operating margin, and fiscal 2017 revenue backlog goals was 101.9%, yielding an initial payout factor of 107.4% under our EIP. Additional details are located in “Overview of Fiscal 2016 Payout Matrix” below.
- In addition to exceeding 100% of these goals on average, we further achieved 116.0% of our EIP fiscal 2018 revenue backlog goal. Based on our EIP Payment Formula, plan funding increased to 177.2% of target levels. Additional details are located in “Actual Fiscal 2016 Cash Incentive Payments” below.
- We achieved 102.8% of the net income goal for our PRSUs, and accordingly, all PRSUs were earned and eligible to vest. Our NEOs do not receive additional shares for any overachievement of our PRSU goal. Additional details are located in “Fiscal 2016 PRSU Achievement” below.

As a collective group, total direct compensation for our NEOs rose over last year due to our strong performance in fiscal 2016:

NEO	Change in Total Compensation over Fiscal 2015(1)	Commentary
Aart J. de Geus	16.2%	The Compensation Committee increased the target dollar value of our Co-CEOs' annual equity grant to recognize their significant contributions in helping the company achieve its corporate goals and to better align our Co-CEOs' compensation with current market benchmarks.
Chi-Foon Chan	16.2%	Dr. Chan receives the same compensation as Dr. de Geus and, as with Dr. de Geus, his actual earned compensation increased primarily due to an increase in the target dollar value of his annual equity grant in fiscal 2016.
Trac Pham	19.8%	The Compensation Committee increased Mr. Pham's salary and the target dollar value of his annual equity grant to recognize Mr. Pham's further development in his role and to better align his compensation with current market benchmarks.
Brian M. Beattie	(18.2%)	As compared to fiscal 2015, Mr. Beattie's total compensation decreased primarily due to his receipt of a one-time promotional stock option grant in fiscal 2015 in recognition of his new role as Executive Vice President and Chief Administrative Officer.
Joseph W. Logan	9.3%	The Compensation Committee increased Mr. Logan's salary and the target dollar value of his annual equity grant to recognize the continuing importance of Mr. Logan's role in guiding our overall performance.
John F. Runkel, Jr.	(0.4%)	Mr. Runkel's total compensation in fiscal 2016 remained relatively flat as compared to fiscal 2015.

(1) Based on total compensation for fiscal 2016 and 2015 reported in the Summary Compensation Table in the "Executive Compensation Tables" section below.

## Compensation Practices and Governance Policies

In designing our executive compensation program, our goal is a competitive and internally equitable program that reflects company performance, job complexity, and the value provided by our executives, while also promoting long-term retention and motivation. We have increased our revenue, while remaining profitable, in each of the last **eleven** fiscal years. We believe our compensation practices and governance policies have been important in helping us achieve this consistent long-term financial performance, and we must continue to cultivate executive talent to lead our business and engage our global workforce to remain successful.

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<b>Pay-for-Performance Commitment</b>	<ul style="list-style-type: none"><li>• Fixed compensation for fiscal 2016 was only 10% of target total direct compensation for our Co-CEOs and 21% for our other NEOs as a group.</li></ul>
<b>Balanced Mix of Performance Goals</b>	<ul style="list-style-type: none"><li>• Our cash-based Executive Incentive Plan encourages our NEOs to achieve current fiscal year revenue and operating margin goals as well as revenue backlog goals for multiple years in the future, which promote a predictable long-term revenue stream and help minimize incentives for risky short-term business practices.</li><li>• Our PRSUs require our NEOs to achieve a rigorous non-GAAP net income target for the current fiscal year to earn the full award, and encourage retention and long-term accountability through time-based vesting over the following three years.</li></ul>
<b>Peer Group Analysis</b>	<ul style="list-style-type: none"><li>• In setting fiscal 2016 total direct compensation for our NEOs, the Compensation Committee reviewed peer data, with an emphasis on the 50<sup>th</sup> percentile of our peer group. However, the Compensation Committee set fiscal 2016 target direct compensation for each of our Co-CEOs below the 25<sup>th</sup> percentile, reflecting our Co-CEOs' emphasis on internal pay equity and our Compensation Committee's sensitivity to budgetary concerns raised by a Co-CEO leadership structure.</li><li>• While the Compensation Committee views peer data as a useful guide to assess competitiveness, it is just one of several factors in Committee decisions, which also take into account an NEO's level of experience, contributions, performance, retention value of unvested awards, and our compensation budget, among other factors.</li></ul>
<b>Stock Ownership and Other NEO Requirements</b>	<ul style="list-style-type: none"><li>• Synopsys adopted Stock Ownership Guidelines in 2003, and all of our NEOs are in compliance with them as of January 2, 2017. At the end of fiscal 2016, Dr. de Geus held 596,453 shares of our common stock, valued (as of the end of fiscal 2016) at over 63 times his salary. Dr. Chan held 194,128 shares, valued (as of the end of fiscal 2016) at over 16 times his salary.</li><li>• Our NEOs are prohibited from engaging in hedging transactions in our stock, holding our stock in a margin account, or pledging our stock as collateral for a loan.</li></ul>

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**Reasonable  
Change of Control  
Provisions**

- Our NEO change of control agreements are “double trigger”—NEOs do not receive a payment simply due to a change of control and do not receive a payment if they continue to be employed in a similar role after the change of control.
- The “double trigger” change of control salary continuation and cash incentive award payments potentially owed to our NEOs do not exceed two times their annual target cash compensation.
- Our agreements do not provide for “golden parachute” excise tax gross ups. Instead, our agreements provide for the clawing back of compensation should excise taxes be triggered in certain situations.

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**Risk Mitigation**

- The performance goals for our cash and equity incentive awards use a variety of performance metrics and focus on both near-term and long-term goals.
- Our cash and equity incentive awards contain a range of performance levels and payouts to discourage risky actions to meet an all-or-nothing performance goal.
- Our cash incentive awards and PRSUs are capped, and the Compensation Committee retains negative discretion to reduce our NEOs’ cash incentive payments.
- The Compensation Risk Assessment on page 63 describes our Compensation Committee’s assessment that our company-wide compensation policies and practices are reasonable and encourage appropriate behaviors without creating risks that are reasonably likely to have a material adverse effect on us.

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**Other Important  
Compensation  
Practices**

- We do not provide any perquisites to our NEOs.
- We do not provide a matching contribution or preferential interest rates in our deferred compensation plans.
- We maintain a clawback policy for the recovery of performance-based compensation (both cash and equity) in the event of a substantial financial restatement.
- We aggressively manage our equity burn rate, limiting gross share usage to 2.3% in fiscal 2016.

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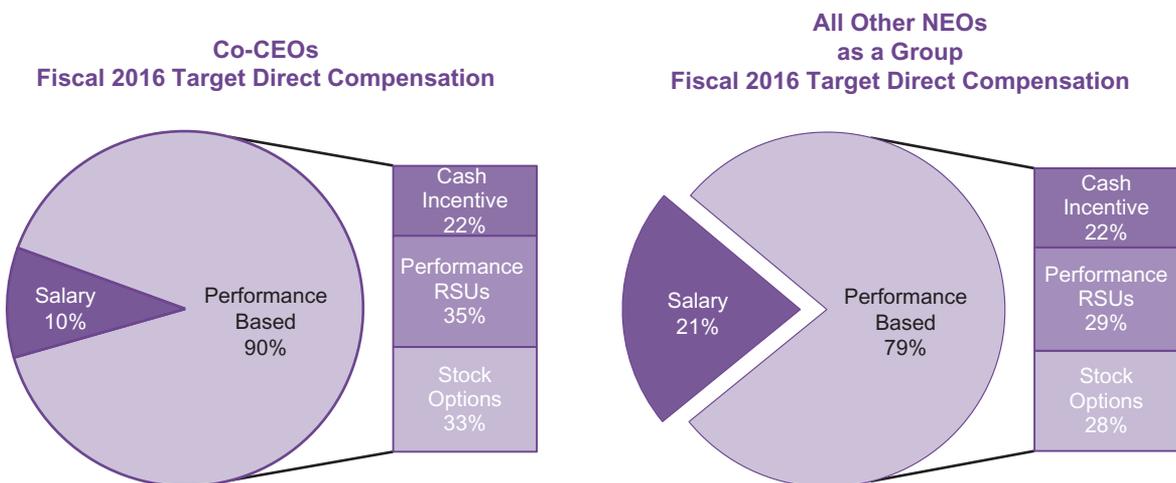
**Compensation  
Governance**

- Our Compensation Committee is composed solely of independent directors.
  - The Compensation Committee regularly meets in executive sessions without management present.
  - The Compensation Committee directly retains a compensation consultant the Committee has determined to be independent, using the factors set out in applicable SEC and NASDAQ rules.
  - Our Compensation Committee reviews tally sheets of executive compensation, which provide a holistic view of NEO compensation.
  - Our Board of Directors elected to hold an annual advisory say-on-pay vote, and our Compensation Committee considers the outcome of the vote in making compensation decisions.
  - Our 2006 Employee Equity Incentive Plan forbids the repricing of equity awards without stockholder approval and contains other features designed to protect stockholder interests, as described in Proposal 2 above.
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## Fiscal 2016 NEO Compensation Details

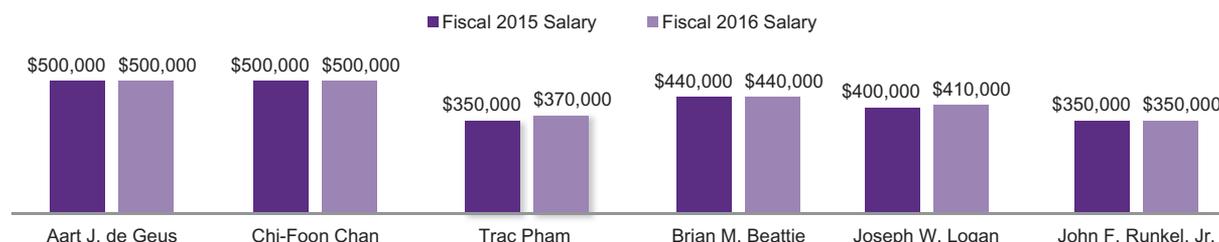
Our three core elements of NEO direct compensation are salary, a cash incentive payment opportunity and equity awards. Our NEOs are also compensated indirectly through our employee benefit plans.

The large majority of each NEO's target total direct compensation is "performance-based"—that is, contingent upon the overall performance of our business or our stock price. The Compensation Committee uses a balanced mix of performance metrics with varying near- and long-term impact in our performance-based compensation.



## Salary

Salaries compensate our NEOs for expected levels of day-to-day performance. Our Compensation Committee believes that salaries should be determined by each executive officer's role and responsibilities, our financial projections, peer data, our budget for the coming year, and historical salary levels.



All NEO salaries other than Mr. Pham's and Mr. Logan's remained the same in fiscal 2016. The Compensation Committee increased Mr. Pham's salary by \$20,000, or approximately 6% over fiscal 2015, to reflect Mr. Pham's further development in his role and to improve the competitiveness of his total target compensation, which was below the 25<sup>th</sup> percentile of our peer group for fiscal 2015. Mr. Logan's salary was increased by \$10,000, or approximately 3% over fiscal 2015, to recognize his key contributions in an increasingly competitive sales environment.

Other than an increase in fiscal 2013 to reflect Dr. Chan's promotion from Chief Operating Officer to Co-CEO, neither of our Co-CEOs received a salary increase for the past **nine** years (2008-2016).

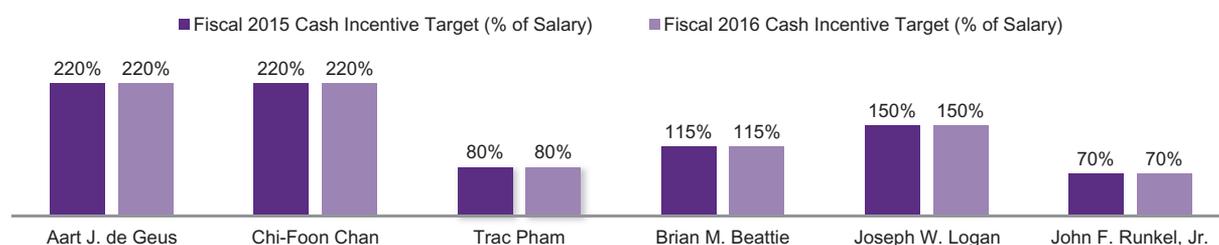
## Cash Incentive Payment

We use annual cash incentive compensation to align NEO performance with near-term financial objectives and future revenue goals, which reward contributions that have a multi-year impact. These cash incentive payments can be paid to NEOs only if we achieve a significant level of our financial performance goals, which advance our long-term strategic plans and, ultimately, shareholder value, over time. Our Compensation Committee grants cash incentive compensation opportunities under our

2006 Employee Equity Incentive Plan, as amended, which was most recently approved by our stockholders in March 2016. The Compensation Committee calculates whether cash incentive opportunities have been earned according to our Executive Incentive Plan—162(m) (EIP), which was originally approved by the Compensation Committee in January 2010 and was most recently updated for use in fiscal 2017, as detailed in “Fiscal 2017 NEO Target Compensation Decisions” below.

**Executive Incentive Plan.** Under the EIP, our Compensation Committee approves **cash incentive targets** for the fiscal year, our annual objective **performance goals**, and a **payout matrix** that determines how much of the target may be paid at each level of achievement of our performance goals. After the end of the fiscal year, the Compensation Committee applies a pre-determined formula provided by the EIP to calculate the amount of potential cash incentive payments, but it retains discretion to reduce those payments below the amounts produced by the formula.

**Cash Incentive Target.** A cash incentive target is the amount of cash incentive compensation that an NEO could earn if we achieve our performance goals. Targets are expressed as a percentage of an NEO’s salary. In reviewing targets, our Compensation Committee takes into consideration each executive officer’s role and responsibilities, our financial projections, the budget for the coming year, peer data, and historical compensation levels.



The Compensation Committee did not make any adjustments to our NEOs’ cash incentive targets for fiscal 2016. Furthermore, other than adjustments in fiscal 2013 to make target levels for both Co-CEOs equal, reflecting Dr. Chan’s promotion to Co-CEO, neither Co-CEO received an increase in his target cash incentive payment for the past **nine** years (2008-2016).

**Performance Goals.** The EIP requires our Compensation Committee to set annual performance goals based on revenue, operating margin, and revenue backlog. We must reach a high level of achievement of these equally-weighted goals, which the EIP refers to as **Corporate Financial Goals**, before any cash incentive payment may be earned. In addition, under the EIP, the Compensation Committee sets a further revenue backlog goal called a **Revenue Predictability Goal** that, if fully achieved, can increase the funding in the EIP through a multiplier.

The EIP uses current fiscal year revenue and non-GAAP operating margin to focus our NEOs on revenue growth and cost control for the current fiscal year. The EIP goals based on two subsequent years of revenue backlog encourage our NEOs to address future revenue and revenue predictability, rewarding contributions that have a multi-year impact. We believe the exclusive use of corporate performance metrics, rather than a mix of corporate and individual metrics, fosters teamwork among our NEOs and reflects the importance of company-wide performance to stockholder value. Our Compensation Committee believes the consistent application of this blend of performance measures, which have been used for nine consecutive fiscal years, allows our NEOs to focus on sustained performance rather than short-term accomplishments and has contributed to our consistent revenue growth and profitability.

The Compensation Committee sets goals based on the operating plan approved by our Board of Directors. For fiscal 2016, the Compensation Committee selected goals it believed to be challenging yet attainable in the absence of significant deterioration in macroeconomic or broader industry conditions.

## Fiscal 2016 Corporate Financial Goals, Revenue Predictability Goal, and Goal Achievement

Corporate Financial Goals	Performance Weight	Fiscal 2016 Target	Fiscal 2016 % Achieved
Fiscal 2016 revenue	33.33%	\$2.370 billion	102.2%
Fiscal 2016 non-GAAP operating margin(1)	33.33%	24.2%	97.1%
Fiscal 2017 revenue backlog(2)	33.34%	\$1.836 billion	106.3%
<b>Average Achievement</b>			<b>101.9%</b>

Revenue Predictability Goal	Fiscal 2016 Target	Fiscal 2016 % Achieved
Fiscal 2018 revenue backlog(2)	(3)	116.0%

- (1) Non-GAAP operating margin is GAAP operating margin adjusted to eliminate the effect of stock compensation, acquisition-related costs, amortization of intangible assets, restructuring activities, certain unusual events and the income tax effect of pre-tax non-GAAP adjustments.
- (2) Revenue backlog for a particular year is the portion of committed orders not yet recognized as revenue but that we expect to be recognized in that particular year, measured as of the end of the current fiscal year.
- (3) We consider our second-year revenue backlog target to be confidential, and the disclosure of this target would cause us competitive harm. In general, the Compensation Committee sets revenue backlog targets from year to year that it believes to be challenging but attainable in the absence of significant deterioration in macroeconomic or broader industry conditions.

Fiscal 2016 was a strong performance year for us. Although we only achieved 97.1% of our non-GAAP operating margin goal, primarily reflecting higher employee-related costs from organic growth and acquisitions in fiscal 2016, our average achievement of our three Corporate Financial Goals was 101.9%. We also performed well against our Revenue Predictability Goal, achieving 116.0% of our target, which resulted in the application of a multiplier to potential NEO cash incentive payments, as described below.

**Payout Matrix.** Each year, our Compensation Committee approves a payout matrix that determines, within boundaries established by the EIP, what percentage of cash incentive targets can be paid out at each level of achievement of our Corporate Financial Goals. The EIP requires a minimum average achievement of 90% of our Corporate Financial Goals before our NEOs can earn any cash incentive payment. Furthermore, according to the EIP, the payout matrix may not award more than 67.5% of a target payment for that 90% average achievement threshold.

The EIP is structured in this way to provide a limited payment opportunity when performance goals are narrowly missed. We believe this limits our exposure to excessive risk-taking that can arise with “all or nothing” performance conditions. We believe this minimum 90% average achievement level holds our NEOs to a higher level of performance than peer practice. Our EIP also has a higher performance threshold than our broad-based employee incentive compensation plans to reinforce accountability at the leadership level.

### Overview of Fiscal 2016 Payout Matrix

Average Achievement of Corporate Financial Goals	Corporate Financial Payout Factor(1)
≥125%	150%
103%	112.7%
<b>100%</b>	<b>100%</b>
90%	67.5%
<90%	0%

- (1) We round our average achievement to the nearest quarter percent and use linear interpolation to calculate the exact payout factor for achievement levels that fall in between levels specified in the matrix. Since we achieved our Corporate Financial Goals at an average of 101.9%, the Corporate Financial Payout Factor is 107.4% for fiscal 2016.

For fiscal 2016, our Compensation Committee approved a payout matrix that allowed our NEOs to earn 100% of their cash incentive targets if we achieved an average of 100% of our Corporate Financial Goals, which was consistent with incentive compensation plans for our other employees. We believe that using an average achievement rate of three metrics, rather than use of just one metric, promotes sustainable growth.

**EIP Payment Formula.** After the end of our fiscal year, our Compensation Committee certifies whether performance goals were met and uses the following formula from the EIP to calculate potential cash incentive payments:



Factor	How It Works	Objective	Levels for Fiscal 2016
Corporate Financial Payout Factor	We calculate the average achievement of our three Corporate Financial Goals and match it with the corresponding Corporate Financial Payout Factor in our Payout Matrix (see above).	Each of the three Corporate Financial Goals is equally weighted to emphasize not only current fiscal year financial goals but also future revenue.	<b>107.4%</b> Corresponding to average goal achievement of 101.9%.
Revenue Predictability Payout Factor (if applicable)	If we achieve more than 100% of our Revenue Predictability Goal, the EIP multiplies potential cash incentive payments by a Revenue Predictability Payout Factor, ranging from 100% to 150% for fiscal 2016, based on the level of overachievement. Under-performance does not decrease potential payments.	Our Compensation Committee believes this factor encourages our NEOs to achieve a sustained and predictable future revenue stream.	<b>150.0%</b> Based on achievement of 116.0% of our Revenue Predictability Goal.
CFG Multiplier (if applicable)	If the average achievement of our Corporate Financial Goals exceeds 100%, a multiplier (the CFG Multiplier) is applied to potential cash incentive payments. For fiscal 2016, the potential CFG Multiplier was 1.10 consistent with previous years.	Our Compensation Committee believes the CFG Multiplier encourages our NEOs to maximize their efforts to achieve outstanding results for our stockholders.	Applicable, due to average goal achievement of 101.9%, exceeding 100%.

**Cap:** Every cash incentive payment is capped by the EIP at the lesser of \$2,000,000 or 200% of the NEO's target.

**Actual Fiscal 2016 Cash Incentive Payments.** Actual cash incentive payments are only approved after our Compensation Committee has reviewed the potential cash incentive payment calculations under the objective EIP payment formula and considered other relevant information not incorporated into the formula, such as the impact of major acquisitions during the year, individual performance, and affordability.

The Compensation Committee is empowered to reduce potential cash incentive payments, regardless of whether any multiplier has been earned. The Compensation Committee may not increase potential payments, and in no event can an actual cash incentive payment exceed the lesser of \$2,000,000 or 200% of the NEO's cash incentive target.

In December 2016, our Compensation Committee met with Dr. de Geus to discuss the fiscal 2016 performance of each of the other NEOs, calculate potential cash incentive payments, and determine the actual incentive payments. Based on our achievement of EIP performance goals, the calculation of cash incentive payments using the EIP's payment formula yielded awards of 177.2% of our NEOs' targets, which is based on the product of our Corporate Financial Payout Factor of 107.4%, Revenue Predictability Payout Factor of 150.0%, and CFG Multiplier of 1.10. However, after careful consideration, and factoring in budgetary goals, the Compensation Committee reduced total EIP awards moderately below this level, by approximately 6% in the aggregate, to yield awards of 166.8% of our NEOs' targets as a group, in the following amounts:

NEO	Target Cash Incentive Payment	Actual Cash Incentive Payment
Aart J. de Geus	\$ 1,100,000	\$ 1,753,000
Chi-Foon Chan	1,100,000	1,753,000
Trac Pham	296,000	524,100
Brian M. Beattie	506,000	710,800
Joseph W. Logan	615,000	1,089,500
John F. Runkel, Jr.	245,000	404,600

## Equity Awards

We believe that equity awards align the interests of our NEOs with the long-term interests of our stockholders by rewarding long-term value creation measured by our stock price and by providing retention incentives through multi-year vesting periods.

Our Compensation Committee grants the following equity awards to our NEOs under our 2006 Employee Plan:

- **Performance-based restricted stock units (PRSUs)**, which are eligible to vest only upon the achievement of pre-established performance criteria and are subject to time-based vesting thereafter. If earned, PRSUs increase or decrease in value directly with our stock price, further aligning NEO and stockholder interests.
- **Stock options** with time-based vesting. Stock options encourage long-term performance as they are only valuable if our stock price increases over time, as the awards vest. Accordingly, the Compensation Committee considers stock options, as well as PRSUs, to be performance-based compensation.

The size of equity awards granted to each NEO is based on an estimated target dollar value. The Compensation Committee considers each NEO's role and responsibilities, historical compensation levels, the impact of award size on our burn rate, and peer data in determining awards. The Compensation Committee does not have a specific formula that weights these factors. Our equity budget for the coming year is also a critical factor, as the Compensation Committee is mindful of potential stockholder dilution and internal pay equity between NEOs and our employees in general when approving grants.

## Fiscal 2016 Equity Grants

NEO	Stock Options(1)	PRSU Shares(2)	Grant Date Fair Value of Equity Awards
Aart J. de Geus	187,007	38,691	\$3,433,244
Chi-Foon Chan	187,007	38,691	3,433,244
Trac Pham	51,560	10,668	946,606
Brian M. Beattie	51,560	10,668	946,606
Joseph W. Logan	88,160	18,240	1,618,523
John F. Runkel, Jr.	40,340	8,346	740,590

- (1) Stock options vest in 6.25% increments every three months over a period of four years, as long as the NEO provides continuous service to us.
- (2) As discussed further under “PRSUs Terms” below, these PRSUs were subject to a non-GAAP net income performance goal of \$454.0 million for fiscal 2016.

**Co-CEOs.** The Compensation Committee approved an estimated target dollar value of \$3.5 million for the equity grants to each of our Co-CEOs, an increase of approximately 33% by grant date fair value from fiscal 2015, to better align with our peer companies as set forth in “Peer Group Comparisons” below. Furthermore, this continues the trend of keeping our Co-CEOs’ salary low relative to our peers and maintaining a higher equity award target to award attainment of performance goals. The target dollar value was converted into a number of shares based on estimated conditions on the grant date, as described in “Allocation” below. The grant date fair value reported in the Summary Compensation Table in the “Executive Compensation Tables” section below reflects actual conditions on the grant date.

**Other NEOs.** The Compensation Committee awarded Mr. Pham an increased equity grant over fiscal 2015, approximately 31% greater by grant date fair value, to recognize the further development in his role and to improve the competitiveness of his total target compensation, which was below the 25<sup>th</sup> percentile of our peer group for fiscal 2015. Mr. Logan received an increased equity grant over fiscal 2015, approximately 12% greater by grant date fair value, to recognize the continuing importance of his role in guiding our overall performance. Mr. Beattie received a decreased equity grant over fiscal 2015, approximately 31% less by grant date fair value, due to his one-time promotional stock option grant in fiscal 2015 to recognize his new role as Executive Vice President and Chief Administrative Officer.

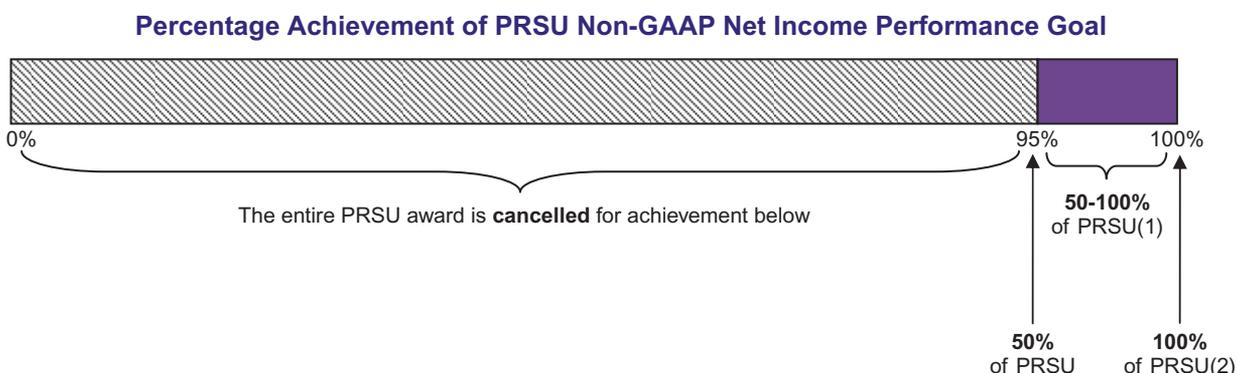
**Allocation.** After choosing the general target dollar value for each NEO’s equity awards, the Compensation Committee sought to allocate the dollar value equally between stock options and PRSUs. The Compensation Committee believes this ratio is appropriate because it encourages our NEOs to focus both on near-term results, by requiring the achievement of a near-term performance condition for the PRSUs to vest, and on long-term value creation, since stock options and PRSUs reward sustained increases in our stock price, though only to the extent the employee vests in the award by remaining in service for four years. We also believe this mix effectively manages dilution from our equity compensation program, allowing us to grant fewer shares through PRSUs while delivering value comparable to stock options. To determine the target number of PRSU shares to be granted for fiscal 2016, the Compensation Committee used our closing stock price on the grant date to calculate an award worth half of the target equity value. For stock options, the Compensation Committee used a Black-Scholes option-pricing model to estimate the fair value of a stock option share on the expected grant date and allocated the other half of the total target equity value to stock options. Because the stock option grants were based on estimates of conditions on the grant date, the actual grant date fair value of the options reported in the Summary Compensation Table below is different, and represents slightly more than half of total equity grant value, as it is based on our actual Black-Scholes stock option value on the effective grant date.

In determining PRSU grants, the Compensation Committee assumes that 100% of the PRSUs’ performance condition will be achieved. In addition to the possibility that the condition will not be met, the grant date value of any NEO equity award does not necessarily represent the actual value that may be realized upon vesting or exercise of such award.

**PRSU Terms.** As in past years, the Compensation Committee selected a non-GAAP net income goal for our fiscal 2016 PRSUs because it is an important measure of our success that is distinct from other metrics used in our EIP, such as the revenue backlog goals focused on our future revenue streams. Non-GAAP net income is GAAP net income adjusted for stock compensation expense, acquisition-related costs, amortization of intangible assets, certain unusual events and the income tax effect of pre-tax non-GAAP adjustments. Our fiscal 2016 goal was increased above our fiscal 2015 goal to a non-GAAP net income of \$454 million.

Our PRSUs are subject to time-based vesting over four years. If the performance goal is achieved, only 25% of the earned PRSU shares vest at the end of the performance year. The remaining earned PRSU shares vest annually over the following three years, provided the NEO continues to remain employed by Synopsys, which encourages retention as well as long-term focus and accountability.

Each PRSU grant is made at the maximum amount of shares that can be earned if we fully achieve our goal and will be reduced for actual performance below it. There is no increase in shares for overachievement. The actual number of shares that are earned and eligible to vest depends on the level of achievement of our goal, and achievement below 95% results in the cancellation of the entire award:



- (1) If we achieve between 95% and 100% of our performance goal, then between 50% and 100% of the PRSU award is earned and eligible to vest. The exact amount of shares earned is calculated according to a matrix approved by the Compensation Committee.
- (2) 100% of the PRSU award is earned and eligible to vest if we achieve 100% or more of our performance goal. No additional shares are earned if we exceed our performance goal.

The Compensation Committee rewards performance levels between 95% and 100% to provide our NEOs with a partial award for substantially achieving our non-GAAP net income goal. The Compensation Committee believes this limits excessive risk-taking that can be encouraged by a single “all or nothing” performance condition.

**Fiscal 2016 PRSU Achievement.** We achieved 102.8% of our fiscal 2016 non-GAAP net income performance goal of \$454 million, and accordingly, 25% of our NEOs’ fiscal 2016 PRSUs vested on December 15, 2016. The remaining 75% of the shares are scheduled to vest in three equal annual installments beginning on December 8, 2017, as long as the NEO provides continuous services to us.

NEO	Maximum PRSU Shares at Grant	Actual PRSU Shares Earned and Eligible for Vesting
Aart J. de Geus	38,691	38,691
Chi-Foon Chan	38,691	38,691
Trac Pham	10,668	10,668
Brian M. Beattie	10,668	10,668
Joseph W. Logan	18,240	18,240
John F. Runkel, Jr.	8,346	8,346

**Other Awards.** The Compensation Committee retains discretion to grant new-hire, promotional or special recognition awards to NEOs on terms that vary from our annual grants. Except in the case of these special awards, the Compensation Committee generally does not grant restricted stock units unless they are subject to performance conditions. There were no new-hire, promotional or special recognition restricted stock unit awards for our NEOs in fiscal 2016.

## Other Benefits

**General Health, Welfare and Other Benefit Plans.** Our NEOs are eligible to participate in a variety of employee benefit plans on the same terms as our other employees, including medical, dental and vision care plans, life and disability insurance, our tax-qualified 401(k) plan, and our Employee Stock Purchase Plan. We believe these benefits are consistent with benefits provided by our peer group and help us to attract and retain high quality executives.

In fiscal 2015, we changed our time-off policy for all U.S. employees. Pursuant to this policy, exempt employees do not accrue paid time off and are not limited to or allotted a specific amount of paid time off. We froze such employees' earned time off as of January 3, 2015, and the frozen amount was paid to employees, including our NEOs, in two installments in July 2015 and March 2016 (or earlier on a termination of employment, if required by applicable law).

**Perquisites and Other Benefits.** No perquisites or other special executive benefits were given to our NEOs in fiscal 2016. In general, Synopsys and our Compensation Committee do not provide perquisites to our NEOs.

**Deferred Compensation Plans.** In 1996, the Compensation Committee established a deferred compensation program that allows our NEOs and other highly compensated individuals to save a portion of their compensation on a tax-deferred basis. We offer this program in order to remain competitive with a number of our peer companies and because the tax benefit it offers comes at a relatively low cost to us. The program is currently administered through two deferred compensation plans (one of which is "grandfathered" and closed to new participants). Under these plans, our NEOs and other highly compensated employees may elect to defer up to 50% of their salaries and up to 100% of their cash incentive compensation. Distributions from the deferred compensation plans are generally payable upon termination of employment and are made over 5 to 15 years or as a lump sum, at the option of the participant. We do not make any matching or discretionary contributions to the plans, there are no guarantees or minimum returns on investments, and undistributed amounts under the plans are subject to the claims of our creditors.

## Severance and Change of Control Benefits

**Executive Change of Control Severance Benefit Plan.** We maintain an Executive Change of Control Severance Benefit Plan (Change of Control Plan) that was approved by our Board of Directors in March 2006 and most recently amended in December 2016 primarily to reflect changes in applicable law and administrative practices. Each of our NEOs is covered under the Change of Control Plan, except Drs. de Geus and Chan, whose benefits are described below. The Change of Control Plan provides for limited cash and equity benefits in the event an executive's employment is terminated in connection with a change of control of Synopsys. The Compensation Committee believes these incentives will help us retain our executives, and therefore maintain the stability of our business, during the potentially volatile period accompanying a change of control. The Compensation Committee believes the benefits are also comparable to benefits offered by our peer group, which helps us attract talented executives and maintain a consistent management team.

The Change of Control Plan only provides benefits if there is a "**double trigger**": in addition to requiring a change of control of Synopsys, benefits are only provided if either (i) the eligible executive is involuntarily terminated without cause during the 30 days before or 12 months after the change of control; or (ii) there is a constructive termination of the executive within 12 months after the change of control.

Our potential payment obligations under the Change of Control Plan are described in the subsection titled “Potential Payments upon Termination or Change of Control” in the “Executive Compensation Tables” section below.

#### **Severance and Change of Control Arrangements for Dr. Aart de Geus and Dr. Chi-Foon Chan.**

Drs. de Geus and Chan are not covered by the Change of Control Plan described above but are eligible for severance and change of control benefits through their respective employment agreements, which were entered into in October 1997 and most recently amended in December 2016 primarily to reflect changes in applicable law and administrative practices. As with our other NEOs, we believe that the change of control benefits we offer are reasonable, consistent with benefits offered by our peer group, and would help retain the focused services of Drs. de Geus and Chan in the event of a change of control transaction. We further offer severance benefits to Drs. de Geus and Chan, which are only provided for an involuntary termination, because the benefits help us remain competitive for their services, are comparable to the benefits provided by our peer group to similarly situated executives, and are reasonable in amount.

The severance and change of control provisions are the same in each agreement. Change of control benefits require a “**double trigger**”: they are only provided for (i) an involuntary termination of employment without cause within 24 months following a change of control or (ii) a voluntary resignation of employment for good reason within 24 months following a change of control. Severance benefits are only payable for (a) an involuntary termination without cause or (b) a voluntary resignation for good reason.

Our potential payment obligations under the employment agreements of Drs. de Geus and Chan are described in the subsection titled “Potential Payments upon Termination or Change of Control” in the “Executive Compensation Tables” section below.

**Equity Plans.** If we are acquired or involved in a similar corporate transaction, and the surviving company does not assume, replace or otherwise continue all of our outstanding equity awards, our equity incentive plans generally provide that all employee awards will fully vest. Corporate transactions under the plans generally include a sale or other disposition of 90% or more of our outstanding securities, a sale or other disposition of substantially all of our assets, a merger or consolidation in which we are not the surviving company, or a merger or consolidation in which we are the surviving company but our outstanding shares are converted into other property. We provide this benefit to all employees who hold equity awards under our plans to promote the stability and focused service of our workforce during a potentially uncertain time. Our Compensation Committee believes this benefit encourages our employees to work diligently towards the completion of a transaction that would potentially maximize stockholder value, even when our employees’ own equity awards would not survive the transaction.

### **Fiscal 2017 NEO Target Compensation Decisions**

In setting fiscal 2017 compensation, the Compensation Committee considered the positive results of our stockholders’ 2016 say-on-pay vote as well as the Committee’s belief that our compensation policy remains aligned with our corporate strategy. Our overall compensation philosophy for fiscal 2017 remains consistent with our philosophy for fiscal 2016, continuing our emphasis on pay-for-performance. The Compensation Committee decided to continue to use the same metrics in setting performance goals under our EIP and for our PRSUs as in fiscal 2016, but also added a “Funding Goal” concept for Code 162(m) purposes. Pursuant to the new EIP for fiscal 2017, potential cash incentive payments will now be earned only if we achieve a funding goal carefully selected by the Compensation Committee each year. If the funding goal is achieved, our bonus pool will be initially funded at the maximum level for each NEO. The Compensation Committee will then determine the final award earned by each NEO based on achievement of our performance goals by using the EIP Payment Formula, consistent with prior years. The Compensation Committee believes the goals remain realistic but challenging. In any event, actual awards will not exceed the initial maximum funding level.

At its meetings in December 2016, the Compensation Committee made several adjustments to individual NEO compensation levels for fiscal 2017:

- **Co-CEO Equity Grant Increases.** The Compensation Committee increased each of our Co-CEO's total target compensation by approximately 7.6% to reflect their significant contributions in leading the company and helping us achieve our corporate goals despite recent industry and customer consolidation, and improve the competitiveness of their total target compensation. For example, other than an increase in fiscal 2013 to reflect Dr. Chan's promotion from Chief Operating Officer to Co-CEO, neither of our Co-CEOs has received a salary increase for the past nine years. Furthermore, our Co-CEOs' cash incentive targets (which as calculated using the base salary amounts) have remained at the same level for seven of the last eight years despite market adjustments from our peers during the same timeframe. For fiscal 2017, each of our Co-CEO's (a) salary increased by \$25,000, or 5% over fiscal 2016, (b) cash incentive target percentage increased from 220% to 240%, or 9% over fiscal 2016, and (c) the estimated target dollar value of the equity grants increased by approximately \$200,000, an increase of approximately 6% over fiscal 2016. As in fiscal 2016, the total target dollar value of the equity grants was split approximately equally between PRSU and stock option grants. Even with such increases, total target compensation for each of our Co-CEOs remains below the 25<sup>th</sup> percentile of our peer group.
- **Increase in CFO Total Target Compensation.** To reflect Mr. Pham's further development in his role and to improve the competitiveness of his total target compensation, which was below the 25<sup>th</sup> percentile of our peer group for fiscal 2016, the Compensation Committee increased Mr. Pham's total target compensation by approximately 11%. Mr. Pham's salary was increased by \$25,000, or 6.8% over fiscal 2016. Although his cash incentive target percentage remained at 80% of his salary, his cash incentive target increased by 6.8% as a result of his salary raise. The Compensation Committee increased the estimated target dollar value of his equity grants by approximately \$135,000, an increase of 14% over fiscal 2016, with the total value split approximately equally between PRSUs and stock options.
- **Other NEOs.** Mr. Logan's total target compensation was raised by approximately 16%, recognizing his key contributions in an ongoing competitive sales environment. The Compensation Committee increased the estimated target total dollar value of his equity grants by approximately \$350,000, or 21% over fiscal 2016, split approximately equally between PRSUs and stock options. Mr. Logan salary was also increased by \$30,000, or 7% over fiscal 2016, to \$440,000. No material changes were made to Mr. Runkel's target compensation for fiscal 2016. Mr. Beattie did not receive an equity grant award to date in fiscal 2017. On January 27, 2017, Mr. Beattie informed Synopsys of his intention to retire effective December 22, 2017. Beginning May 1, 2017, Mr. Beattie will relinquish his duties as an executive officer, at which time he will transition into an executive advisory position for the remainder of his tenure. No changes have been made to Mr. Beattie's fiscal 2017 compensation following his retirement announcement.

For fiscal 2017, performance-based compensation is targeted at approximately 90% of total direct compensation for our Co-CEOs and at approximately 77.5% for our other NEOs, as a group.

## Compensation Governance and Our Compensation Philosophy

We have designed our executive compensation program to attract, motivate and retain a team of highly qualified executives who will drive technological and business success. In order to motivate and reward our NEOs for work that improves our long-term business performance and increases stockholder value, we have set out the following objectives:

<p><b>Pay-for-Performance</b> Link NEO compensation to the success of our business objectives</p>	<p><b>Competitiveness</b> Provide competitive compensation that attracts and retains top-performing NEOs</p>	<p><b>Outperformance</b> Motivate NEOs to achieve results that exceed our strategic plan targets</p>
<p><b>Stockholder Alignment</b> Align the interests of NEOs and stockholders through the managed use of long-term incentives</p>	<p><b>Balance</b> Set performance goals that reward an appropriate balance of near- and long-term results</p>	<p><b>Internal Pay Equity</b> Promote teamwork among NEOs by considering internal fairness in setting compensation levels</p>

### Pay-for-Performance

Underlying these objectives is our **pay-for-performance** philosophy. We believe that the large majority of each NEO's target total direct compensation should be "performance-based"—that is, contingent upon the overall performance of our business and our stock performance. For fiscal 2016, 90% of the target total direct compensation of our highest-paid NEOs—Dr. de Geus and Dr. Chan—was performance-based, and 79% of target total direct compensation was performance-based for our other NEOs as a group. We believe this direct link between pay and performance is an effective way to motivate our NEOs to achieve key financial objectives and, ultimately, increase stockholder value.

### Role of Compensation Committee

Our Compensation Committee is responsible for determining NEO compensation. The Compensation Committee comprises three independent directors, meets regularly throughout the year to review and discuss, among other items, our compensation philosophy, changes in compensation governance and compliance rules and best practices, and the composition of our peer group for pay comparisons. In the first quarter of each fiscal year, the Compensation Committee reviews and approves:

- The level of achievement of financial performance goals for the prior fiscal year;
- Annual incentive compensation earned, if any, based on that prior fiscal year achievement;
- Annual financial performance goals for the current fiscal year; and
- The level and mix of NEO target compensation for the current fiscal year.

### Role of Compensation Committee Consultant

Our Compensation Committee directly retained the services of Radford, an Aon Hewitt company, as an independent compensation consultant for fiscal 2016. The Compensation Committee conducts an annual assessment of its consultant's performance and re-appoints its consultant each year. Radford has served as the Compensation Committee's consultant since September 2006. The Compensation Committee may replace Radford or hire additional consultants at any time. The Compensation Committee retains sole authority to appoint and compensate Radford and to oversee its work for the Committee. Synopsys pays the fees for the services provided by Radford to the Compensation Committee. In fiscal 2016, the services provided by Radford included:

- Assisting in the selection of our peer group companies for fiscal 2017 (and with the determination of our fiscal 2016 peer group in fiscal 2015);
- Providing and analyzing compensation survey data;
- Helping the Compensation Committee interpret compensation data;
- Assisting in the review of recent governance trends for potential policy updates;

- Advising on the reasonableness of our NEO compensation levels and programs;
- Assisting in the review of non-employee director compensation, including analysis of benchmarking data;
- Assisting in the review of the NEO compensation disclosure in this Proxy Statement;
- Conducting a detailed review of our cash and equity compensation plans to provide an independent view of the risks associated with our compensation programs, including those for our NEOs; and
- Attending each Compensation Committee meeting, including meeting with the Committee in private sessions, without management present.

In addition to the fees we paid Radford for services provided to our Compensation Committee, we also paid \$70,000 in fees to Radford during fiscal 2016 for access by our Human Resources department to Radford's general employee compensation benchmarking data. After considering the factors set forth in Rule 10C-1(b)(4) under the Exchange Act and NASDAQ Listing Rule 5605(d)(3)(D), including a review of the access fees described above and Radford's representations to the Compensation Committee regarding each factor, the Committee determined that Radford was independent.

## Peer Group Comparisons

Our Compensation Committee reviews compensation data from a specific group of companies that are similar to us in scale and organizational complexity in considering the compensation of our NEOs. For fiscal 2016, the Compensation Committee selected the peer group companies listed below because they: (1) were business or labor market competitors in the software (excluding gaming and e-commerce) or fabless semiconductor industries; (2) generated annual revenues between approximately 0.5 and 2.5 times Synopsys' revenue (approximately \$1.0 billion to \$5.5 billion); and (3) had a market capitalization between approximately 0.5 and 3.0 times Synopsys' market capitalization (approximately \$3.5 billion to \$22.0 billion). At the time of the selection in June 2015, Synopsys had total revenue for the previous twelve months of approximately \$2.12 billion and a market capitalization of approximately \$7.30 billion.

### Fiscal 2016 Peer Group

Akamai Technologies, Inc.	Mentor Graphics Corporation
ANSYS, Inc.	Microchip Technology Inc.
Autodesk, Inc.	Nuance Communications, Inc.
Cadence Design Systems, Inc.	NVIDIA Corporation
Citrix Systems, Inc.	PTC Inc.
Intuit Inc.	Red Hat, Inc.
Keysight Technologies, Inc.	Trimble Navigation Ltd.
KLA-Tencor Corporation	Xilinx, Inc.
Linear Technology Corporation	
Marvell Technology Group Ltd.	

The Compensation Committee uses peer group comparisons to measure the competitiveness of our compensation practices. Peer data is just one of the factors in the Compensation Committee's pay decisions, however, which also take into account individual performance, an NEO's level of experience and responsibilities, internal pay equity, our compensation budget, historical compensation levels, and other considerations.

- For fiscal 2016, the Compensation Committee referred to the 50<sup>th</sup> to 75<sup>th</sup> percentiles of our peers, with particular emphasis on the 50<sup>th</sup> percentile, to compare target total direct compensation levels. The Compensation Committee believes this range provides meaningful differentials in pay levels that represent differences in the criticality and performance of each role across companies, and also reflects the full range of competitive pay at our peer companies.

- For specific compensation components, the Compensation Committee looked to salary ranges below the 25<sup>th</sup> percentile of our peer group as a guide for our Co-CEOs, and to the 25<sup>th</sup> to 50<sup>th</sup> percentile as a guide for our other NEOs, in order to continue to emphasize performance-based compensation in our NEOs' compensation mix. As a result, the total target direct compensation for 5 of our 6 NEOs is set at or below the 50<sup>th</sup> percentile as compared to our peers for fiscal 2016.

Fiscal 2016 total target compensation for each of our Co-CEOs was below the 25<sup>th</sup> percentile of our peers. The Compensation Committee believes this level was appropriate as it reflects our Co-CEOs' emphasis on internal pay equity and helps to alleviate budgetary concerns raised by a Co-CEO structure. While the Compensation Committee increased the salary level, cash incentive target, and target dollar value of the equity grants to our Co-CEOs for fiscal 2017 to improve competitiveness, total target compensation for fiscal 2017 for each of our Co-CEOs still remained below the 25<sup>th</sup> percentile of peers.

## Role of Management

Our Compensation Committee discusses NEO performance assessments and compensation targets with Dr. de Geus and our Senior Vice President of Human Resources and Facilities. To assess Co-CEO performance, the Compensation Committee oversees a comprehensive assessment process that includes feedback from our Board of Directors and members of senior management and is facilitated by our Senior Vice President of Human Resources and Facilities. We also have an executive compensation team that provides background on company budgetary constraints and internal pay comparisons to help the Compensation Committee understand Radford's recommendations in those contexts. No NEO is present for Compensation Committee decisions related to their individual compensation.

## Tally Sheets

Prior to approving target compensation levels for the upcoming fiscal year, our Compensation Committee reviews tally sheets for each NEO to review how each core element of compensation relates to other elements and to total pay. The tally sheets summarize target total direct compensation, as well as potential payments upon change of control or, if applicable, involuntary termination. The tally sheets also summarize historical compensation for our NEOs, allowing the Compensation Committee to review NEO total pay that could be earned over time.

## Annual Say-on-Pay Vote

Our stockholders have the opportunity to cast an annual advisory vote on our NEO compensation (say-on-pay vote)—see Proposal 5 above. In 2016, we held our sixth annual advisory stockholder vote on our executive compensation. Last year's proxy statement detailed our fiscal 2015 executive compensation as well as important compensation decisions for fiscal 2016, including fiscal 2016 NEO salaries, equity grants, and the metrics that would be used in determining achievement of performance-based compensation.

Approximately 95% of voted shares approved our executive compensation as disclosed in last year's proxy statement. Although the vote is non-binding, the Compensation Committee considers the results of the say-on-pay vote when making compensation decisions, allowing our stockholders to provide input on our compensation philosophy, policies and practices. The Compensation Committee believes that the vote demonstrated strong support for its decision to maintain a similar compensation philosophy and structure for fiscal 2016.

## Other Important Compensation Practices

**Stock Ownership Guidelines.** Our Compensation Committee has maintained stock ownership guidelines since fiscal 2003 to further align the interests of our senior management with those of our stockholders. Under our current guidelines, individuals employed in certain specified positions are encouraged to achieve the recommended stock ownership level within four years. The stock ownership

recommendations for our NEOs are: Dr. de Geus—50,000 shares; Dr. Chan—50,000 shares; Mr. Pham—10,000 shares; Mr. Beattie—10,000 shares; Mr. Logan—10,000 shares; and Mr. Runkel—10,000 shares.

As of January 2, 2017, each of our NEOs either held the recommended number of shares or had not yet served for four years. Our Co-CEOs each held at least three times their recommended number of shares.

**Equity Grant Timing Policy.** We generally grant equity awards to executives at the beginning of each fiscal year at a Compensation Committee meeting that is typically scheduled more than a year in advance. For stock option grants, the Compensation Committee sets the exercise price at the closing price of our common stock on the NASDAQ Global Select Market on the date of the meeting. We generally plan to hold the meeting within two weeks after the release of our financial results so that the option exercise price reflects a fully-informed market price. In the event the meeting falls before the release of our financial results, the Compensation Committee will generally approve the stock option grants prior to the release of our results but set the exercise price to be the market closing price on the second trading day following the release. In the case of new-hire, promotional, or special recognition equity grants for executives, the Compensation Committee typically grants such awards shortly after the hiring, promotion or special achievement occurs, unless it is during a closed company trading window, which includes periods immediately preceding the release of our financial results.

**Burn Rate.** Each fiscal year, the Compensation Committee approves an annual gross equity budget to closely manage our equity compensation share reserve and stockholder dilution. The Compensation Committee endeavors to achieve a gross burn rate that approximates the average rate for our peer group companies as well as for the software and services industry more generally, and to achieve burn rates that are within the limits published by independent shareholder advisory groups, such as ISS.

Our gross burn rate for each of the last several years has been well within the guidelines recommended by ISS. For fiscal 2016, our gross share usage was 2.3%.

**Tax Deductibility of NEO Compensation.** Section 162(m) of the Code generally limits the amount of NEO compensation we may deduct for annual federal income tax purposes to \$1,000,000 per NEO. However, compensation that qualifies as “performance-based” under Section 162(m) may be excluded from the \$1,000,000 limit. Our EIP was designed to allow us to pay “performance-based” cash compensation, and our Compensation Committee may grant equity awards intended to qualify as “performance-based” compensation. Although our Compensation Committee considers the deductibility of the compensation it awards, it retains the flexibility to award compensation that is consistent with our objectives and philosophy even if it does not qualify for a tax deduction.

**Clawback Policy.** In December 2008, our Board of Directors adopted a Compensation Recovery Policy, which allows us to recover or “clawback” cash and equity compensation paid to covered employees under certain circumstances. Pursuant to the policy, we may require a covered employee to return all or a portion of any compensation paid or received after January 1, 2009, if: (1) the compensation was based on the achievement of financial results, and the results were the subject of a substantial restatement of our financial statements as filed with the Securities and Exchange Commission; and (2) less compensation would have been earned by the employee based on the restated financial results. Our Board of Directors has the sole authority to enforce this policy, and it is limited by applicable law. Each of our NEOs is subject to our Compensation Recovery Policy.

**No Hedging Transactions.** Our insider trading policy prohibits our employees, including our NEOs, and directors from engaging in hedging transactions in our common stock.

**No Pledging.** Our insider trading policy prohibits our employees, including our NEOs, and directors from holding our common stock in a margin account or pledging it as collateral for a loan.

## Compensation Risk Assessment

Our Compensation Committee aims to establish company-wide compensation policies and practices that reward contributions to long-term stockholder value and do not promote unnecessary or excessive risk-taking. In furtherance of this objective, in late 2016, our Compensation Committee conducted an assessment of our compensation arrangements, including those for our NEOs. The assessment process included, among other things, a review of our (1) compensation philosophy, (2) compensation at peer group companies, (3) our compensation mix and (4) the terms and payments under our cash and equity incentive plans. As part of that review, our Compensation Committee asked Radford, its independent compensation consultant, to perform a detailed review of our cash and equity compensation plans in comparison to market practices.

The Compensation Committee considered the following, among other factors:

- Our revenue model and our cash incentive plan encourage our employees to focus on creating a stable, predictable stream of revenue over multiple years, rather than focusing on current year revenue at the expense of succeeding years.
- Our cash and equity incentive awards focus on both near-term and long-term goals and, in the case of equity incentive awards, provide for compensation over a four-year period, to encourage our NEOs to remain focused on our performance beyond the immediate fiscal year.
- The performance goals for our cash and equity incentive awards use a variety of performance metrics, which diversifies the risk associated with any one metric or aspect of performance.
- Our cash and equity incentive awards contain a range of performance levels and payouts to discourage executives from taking risky actions to meet a single target with an all-or-nothing result of compensation or no compensation.
- Our EIP caps cash incentive payments at a maximum award size. In addition, the Compensation Committee retains negative discretion to reduce our NEOs' incentive payments under the plan.
- Our cash incentive payments and equity awards are subject to a clawback policy to recover compensation in the event of a substantial financial restatement.
- Our executives are encouraged to hold a meaningful number of shares of our common stock under our stock ownership policy.

Based upon this assessment, our Compensation Committee believes that our company-wide compensation policies and practices are reasonable and encourage appropriate behaviors without creating risks that are reasonably likely to have a material adverse effect on us.

## Conclusion

We remain strongly committed to our pay-for-performance philosophy. As a result of the compensation program described above, the majority of each NEO's compensation depends upon the achievement of our business goals. Our Compensation Committee gives careful consideration to each core element of direct compensation for each NEO. The Compensation Committee believes our NEO compensation program is effective in advancing our goals, reasonable in light of the programs of our peers, and responsible in encouraging our NEOs to work for crucial innovation, business growth and outstanding stockholder returns, without promoting unnecessary or excessive risks.

## Compensation Committee Report\*

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this Proxy Statement with management. Based on the Compensation Committee's review of, and the discussions with management with respect to, the Compensation Discussion and Analysis, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement for filing with the Securities and Exchange Commission.

The foregoing report is provided by the following directors, who constitute the Compensation Committee:

**COMPENSATION COMMITTEE**

Chrysostomos L. "Max" Nikias, Chair

Bruce R. Chizen

Steven C. Walske

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\* This report shall not constitute "soliciting material," shall not be deemed "filed" with the Securities and Exchange Commission, and is not to be incorporated by reference into any of our other filings under the Securities Act of 1933, as amended (referred to in this Proxy Statement as the Securities Act), or the Exchange Act, except to the extent we specifically incorporate this report by reference therein.

## Compensation Committee Interlocks and Insider Participation

During fiscal 2016, the Compensation Committee consisted of Bruce R. Chizen, Chrysostomos L. "Max" Nikias and Steven C. Walske. None of the members of the Compensation Committee is nor was, during fiscal 2016, an officer or employee of Synopsys, none of the members of the Compensation Committee was formerly an officer of Synopsys, and none of our executive officers serves or, during fiscal 2016, served as a member of a board of directors or compensation committee of any entity that has or, during fiscal 2016, had one or more executive officers serving as a member of our Board or Compensation Committee.

## Executive Compensation Tables

### Summary Compensation Table

The following table shows compensation awarded to, paid to, or earned by each of our NEOs for fiscal 2016, who consist of Dr. de Geus and Dr. Chan, our Co-Chief Executive Officers; Mr. Pham, our Chief Financial Officer; Mr. Beattie, our Executive Vice President, Business Operations and Chief Administrative Officer; Mr. Logan, our Executive Vice President of Worldwide Sales and Corporate Marketing; and Mr. Runkel, our General Counsel and Corporate Secretary (collectively, NEOs). The table shows compensation for services performed during fiscal 2016, fiscal 2015, and fiscal 2014.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)(3)	Total (\$)(4)
<b>Aart J. de Geus</b> Co-Chief Executive Officer and Chairman of the Board of Directors	2016	\$ 500,000	\$ —	\$ 1,749,994	\$ 1,683,250	\$ 1,753,000	\$ 28,808	\$ 5,715,052
	2015	500,000	—	1,250,030	1,324,955	1,815,000	29,154	4,919,139
	2014	500,000	—	1,328,643	1,159,823	1,500,000	2,500	4,490,966
<b>Chi-Foon Chan</b> Co-Chief Executive Officer and President	2016	\$ 500,000	\$ —	\$ 1,749,994	\$ 1,683,250	\$ 1,753,000	\$ 26,884	\$ 5,713,128
	2015	500,000	—	1,250,030	1,324,955	1,815,000	27,230	4,917,215
	2014	500,000	—	1,328,643	1,159,823	1,500,000	2,346	4,490,812
<b>Trac Pham</b> Chief Financial Officer	2016	\$ 370,000	\$ —	\$ 482,514	\$ 464,092	\$ 524,100	\$ 15,058	\$ 1,855,764
	2015	350,000	—	350,005	370,990	462,000	15,500	1,548,495
<b>Brian M. Beattie</b> Executive Vice President, Business Operations and Chief Administrative Officer	2016	\$ 440,000	\$ —	\$ 482,514	\$ 464,092	\$ 710,800	\$ 26,442	\$ 2,123,848
	2015	440,000	—	550,020	821,481	759,000	26,565	2,597,066
	2014	400,000	—	525,366	534,217	738,000	2,800	2,200,383
<b>Joseph W. Logan</b> Executive Vice President, Worldwide Sales and Corporate Marketing	2016	\$ 410,000	\$ —	\$ 824,995	\$ 793,528	\$ 1,089,500	\$ 23,769	\$ 3,141,792
	2015	400,000	—	700,010	741,979	1,008,000	23,769	2,873,758
	2014	399,615	—	552,015	667,214	856,000	1,500	2,476,344
<b>John F. Runkel, Jr.</b> General Counsel and Corporate Secretary	2016	\$ 350,000	\$ —	\$ 377,490	\$ 363,100	\$ 404,600	\$ 7,446	\$ 1,502,636
	2015	350,000	—	362,522	384,237	404,300	7,743	1,508,802
	2014	154,808(5)	—	586,350	341,496	153,000	1,500	1,237,154

- (1) The amounts shown for stock awards and option awards represent the aggregate grant date fair value of such awards granted to our NEOs in fiscal 2016, fiscal 2015, and fiscal 2014 as computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718, *Compensation—Stock Compensation*. For each award, the grant date fair value is calculated using the closing price of our common stock on the grant date and, in the case of performance-based restricted stock unit awards, assuming 100% probability of achievement of performance conditions as of the grant date, which is also the maximum level of performance that may be achieved for such awards. These amounts do not represent the actual value that may be realized by the NEO upon vesting or exercise of such awards. For information on the assumptions used to calculate the value of the awards, refer to Note 10 to the consolidated financial statements contained in our 2016 Annual Report on Form 10-K.
- (2) Amounts consist of cash-based incentive compensation earned for the achievement of performance objectives approved by our Compensation Committee for fiscal 2016, 2015, or 2014, as applicable, under our Executive Incentive Plan—162(m) (EIP).
- (3) Amounts include the following:

Name	Accumulated Earned Time Off (\$)(A)	401(k) Matching Contributions (\$)(B)	HSA Matching Contributions (\$)(C)	Matching Charitable Contributions (\$)(D)	Total (\$)
Aart J. de Geus	\$ 25,000	\$ 3,000	\$ 808	\$ —	\$ 28,808
Chi-Foon Chan	\$ 23,076	\$ 3,000	\$ 808	\$ —	\$ 26,884
Trac Pham	\$ 11,095	\$ 3,000	\$ 808	\$ 155	\$ 15,058
Brian M. Beattie	\$ 22,409	\$ 3,000	\$ 808	\$ 225	\$ 26,442
Joseph W. Logan	\$ 20,769	\$ 3,000	\$ —	\$ —	\$ 23,769
John F. Runkel, Jr.	\$ 3,638	\$ 3,000	\$ 808	\$ —	\$ 7,446

- (A) Amounts include accumulated earned time off paid in March 2016. In fiscal 2015, we changed our time-off policy for all U.S. employees. Under our new policy, exempt employees do not accrue paid time off and are not limited to or allotted a specific amount of paid time off. We froze such employees' earned time off as of January 3, 2015, and the frozen amount was paid to employees, including our NEOs, in two installments in July 2015 and March 2016.
  - (B) Amounts include matching contributions made by Synopsys under our tax-qualified 401(k) plan, which provides for broad-based U.S. employee participation.
  - (C) Amounts include matching contributions made by Synopsys to each NEO's health savings account at the same rate as for our other employees who enroll in this health plan.
  - (D) Amounts include matching charitable contributions made by The Synopsys Foundation on behalf of the NEO as part of a broad-based charitable matching program available to all U.S. Synopsys employees.
- (4) Amounts exclude non-qualified deferred compensation earnings because we do not regard the returns from the investment alternatives selected by the executive for such earnings to be above-market or preferential as they are consistent with the types of investment opportunities generally provided to our employees under our tax-qualified 401(k) plan and Synopsys does not supplement or guarantee the returns on amounts deferred.
- (5) Mr. Runkel was appointed General Counsel and Corporate Secretary of Synopsys, effective May 19, 2014. Mr. Runkel's annual salary for fiscal 2014 was set at \$350,000, though Mr. Runkel earned a prorated amount of such salary—\$154,808—as a result of joining mid-year.

## Grants of Plan-Based Awards

The following table sets forth certain information with respect to grants of plan-based awards in fiscal 2016 to our NEOs, including cash awards and equity awards. The equity awards granted to our NEOs in fiscal 2016 were granted under our 2006 Employee Equity Incentive Plan.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			Estimated Future Payouts Under Equity Incentive Plan Awards(2)			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)(3)	Exercise or Base Price of Option Awards (\$/Sh)(4)	Grant Date Fair Value of Stock and Option Awards(5)
		Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)				
Aart J. de Geus	12/15/2015	\$ 742,500	\$ 1,100,000	\$ 2,000,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	19,346	38,691	38,691	—	—	—	\$ 1,749,994
	12/15/2015	—	—	—	—	—	—	—	187,007	\$ 45.23	\$ 1,683,250
Chi-Foon Chan	12/15/2015	\$ 742,500	\$ 1,100,000	\$ 2,000,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	19,346	38,691	38,691	—	—	—	\$ 1,749,994
	12/15/2015	—	—	—	—	—	—	—	187,007	\$ 45.23	\$ 1,683,250
Trac Pham	12/15/2015	\$ 199,800	\$ 296,000	\$ 592,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	5,334	10,668	10,668	—	—	—	\$ 482,514
	12/15/2015	—	—	—	—	—	—	—	51,560	\$ 45.23	\$ 464,092
Brian M. Beattie	12/15/2015	\$ 341,550	\$ 506,000	\$ 1,012,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	5,334	10,668	10,668	—	—	—	\$ 482,514
	12/15/2015	—	—	—	—	—	—	—	51,560	\$ 45.23	\$ 464,092
Joseph W. Logan	12/15/2015	\$ 415,125	\$ 615,000	\$ 1,230,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	9,120	18,240	18,240	—	—	—	\$ 824,995
	12/15/2015	—	—	—	—	—	—	—	88,160	\$ 45.23	\$ 793,528
John F. Runkel, Jr.	12/15/2015	\$ 165,375	\$ 245,000	\$ 490,000	—	—	—	—	—	—	—
	12/15/2015	—	—	—	4,173	8,346	8,346	—	—	—	\$ 377,490
	12/15/2015	—	—	—	—	—	—	—	40,340	\$ 45.23	\$ 363,100

- (1) Represents possible cash awards for fiscal 2016 under the EIP. Cash awards paid to NEOs under the EIP are dependent on the achievement of certain performance targets, as well as the level of achievement. The amounts listed under the "Threshold" column represent the cash awards payable to NEOs under the EIP at a 90% average achievement of the Corporate Financial Goals described in "Compensation Discussion and Analysis" beginning on page 44 under the section titled "Cash Incentive Payment." Pursuant to the EIP, if the average achievement of the Corporate Financial Goals is below 90%, no cash awards are paid. The amounts listed under the "Target" column represent the cash awards payable in fiscal 2016 at a 100% average achievement of the Corporate Financial Goals. The amounts listed under the "Maximum" column represent the maximum cash awards payable, which for each NEO equals the lesser of \$2 million or 200% of the NEO's target variable cash incentive compensation. Actual cash awards paid to the NEOs for fiscal 2016 are reported in the Summary Compensation Table on page 66 under the "Non-Equity Incentive Plan Compensation" column.
- (2) Represents stock awards that are eligible to vest only upon achievement of pre-established performance goals. Such awards are granted as restricted stock units and are issued as an equivalent number of shares of our common stock following vesting. The vesting criterion for the target award was the achievement of \$454.0 million of non-GAAP net income for fiscal 2016, as further described in "Compensation Discussion and Analysis" beginning on page 44 under the section titled "Equity Awards." The amounts listed under the "Target" and "Maximum" columns represent the stock awards eligible to vest if 100%, or more than 100%, respectively, of such non-GAAP net income target is achieved. The amounts listed under the "Threshold" column represent the stock awards eligible to vest if 95% of the non-GAAP net income target is achieved. If less than 95% of the non-GAAP net income target is achieved, no stock awards are eligible to vest. As the target vesting criterion was achieved at more than 100%, 25% of each respective maximum award vested on December 15, 2016, and the remaining 75% of each respective award is scheduled to vest in three equal annual installments beginning on December 8, 2017, so long as the NEO provides continuous services to us.
- (3) 6.25% of the shares subject to such non-statutory stock options vested on the three-month anniversary of the grant date, and vesting will continue as to 6.25% of such shares quarterly thereafter, so long as the NEO provides continuous services to us.
- (4) Represents the closing price of our common stock as reported on the NASDAQ Global Select Market on December 15, 2015, the effective date of grant of these awards.
- (5) Represents the fair value of the stock and option awards on the grant date, as computed in accordance with ASC Topic 718. These amounts do not represent the actual value that may be realized by the NEO upon vesting or exercise of such awards. For information on the assumptions used to calculate the fair value of the stock and option awards, refer to Note 10 to the consolidated financial statements contained in our 2016 Annual Report on Form 10-K.

## Outstanding Equity Awards at Fiscal 2016 Year-End

The following table summarizes the number of securities underlying outstanding equity awards for our NEOs as of October 29, 2016, the end of fiscal 2016:

Name	Option Awards					Stock Awards			
	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)(1)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)(1)
Aart J. de Geus	12/8/2011	200,000	—	\$ 27.65	12/8/2018	—	\$ —	—	\$ —
	12/12/2012	150,000	10,000(2)	32.38	12/12/2019	—	—	—	—
	12/12/2012	—	—	—	—	13,325(3)	777,780	—	—
	12/12/2013	107,319	48,781(4)	38.07	12/12/2020	—	—	—	—
	12/12/2013	—	—	—	—	17,450(5)	1,018,557	—	—
	12/12/2014	73,904	95,020(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	22,095(7)	1,289,685	—	—
	12/15/2015	35,063	151,944(8)	45.23	12/15/2022	—	—	—	—
12/15/2015	—	—	—	—	—	—	38,691(9)	2,258,394	
Chi-Foon Chan	12/12/2012	70,000	10,000(2)	\$ 32.38	12/12/2019	—	\$ —	—	\$ —
	12/12/2012	—	—	—	—	13,325(3)	777,780	—	—
	12/12/2013	68,294	48,781(4)	38.07	12/12/2020	—	—	—	—
	12/12/2013	—	—	—	—	17,450(5)	1,018,557	—	—
	12/12/2014	73,904	95,020(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	22,095(7)	1,289,685	—	—
	12/15/2015	35,063	151,944(8)	45.23	12/15/2022	—	—	—	—
	12/15/2015	—	—	—	—	—	—	38,691(9)	2,258,394
Trac Pham	2/18/2011	1,407	—	\$ 28.63	2/18/2018	—	\$ —	—	\$ —
	5/20/2011	1,750	—	27.01	5/20/2018	—	—	—	—
	8/19/2011	1,094	—	23.39	8/19/2018	—	—	—	—
	5/25/2012	2,900	—	29.89	5/25/2019	—	—	—	—
	12/12/2012	—	—	—	—	625(10)	36,481	—	—
	5/23/2013	—	—	—	—	1,375(11)	80,259	—	—
	5/24/2013	3,937	1,313(12)	35.71	5/24/2020	—	—	—	—
	5/23/2014	3,231	2,513(13)	39.09	5/23/2021	—	—	—	—
	5/24/2014	—	—	—	—	2,877(14)	167,930	—	—
	12/12/2014	20,693	26,606(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	6,186(7)	361,077	—	—
	12/15/2015	9,667	41,893(8)	45.23	12/15/2022	—	—	—	—
12/15/2015	—	—	—	—	—	—	10,668(9)	622,691	
Brian M. Beattie	12/12/2012	3,437	3,438(2)	\$ 32.38	12/12/2019	—	\$ —	—	\$ —
	12/12/2012	—	—	—	—	4,575(3)	267,043	—	—
	12/12/2013	34,431	22,469(4)	38.07	12/12/2020	—	—	—	—
	12/12/2013	—	—	—	—	6,900(5)	402,753	—	—
	12/12/2014	45,821	58,913(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	9,722(7)	567,473	—	—
	12/15/2015	9,667	41,893(8)	45.23	12/15/2022	—	—	—	—
	12/15/2015	—	—	—	—	—	—	10,668(9)	622,691
Joseph W. Logan	12/8/2011	10,313	—	\$ 27.65	12/8/2018	—	\$ —	—	\$ —
	12/12/2012	56,250	3,750(2)	32.38	12/12/2019	—	—	—	—
	12/12/2012	—	—	—	—	5,000(3)	291,850	—	—
	12/12/2013	61,737	28,063(4)	38.07	12/12/2020	—	—	—	—
	12/12/2013	—	—	—	—	7,250(5)	423,183	—	—
	12/12/2014	41,387	53,211(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	12,373(7)	722,212	—	—
	12/15/2015	16,530	71,630(8)	45.23	12/15/2022	—	—	—	—
	12/15/2015	—	—	—	—	—	—	18,240(9)	1,064,669
John F. Runkel, Jr.	5/23/2014	312	19,688(15)	\$ 39.09	5/23/2021	—	\$ —	—	\$ —
	5/23/2014	—	—	—	—	5,000(16)	291,850	—	—
	12/12/2014	21,432	27,556(6)	42.43	12/12/2021	—	—	—	—
	12/12/2014	—	—	—	—	6,408(7)	374,035	—	—
	12/15/2015	7,564	32,776(8)	45.23	12/15/2022	—	—	—	—
12/15/2015	—	—	—	—	—	—	8,346(9)	487,156	

- (1) The market value of stock awards was determined by multiplying the number of unvested or unearned shares by the closing price of our common stock of \$58.37 on October 28, 2016, the last trading day of fiscal 2016, as reported on the NASDAQ Global Select Market.

- (2) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as the NEO provides continuous services to us. Accordingly, 6.25% of the underlying shares for these stock options became exercisable on March 12, 2013 and 6.25% became exercisable quarterly thereafter until fully vested subsequent to fiscal year end on December 12, 2016.
- (3) These restricted stock unit awards were eligible to vest in four equal annual installments only upon achievement of pre-established performance goals, namely the achievement of \$350.3 million of non-GAAP net income for fiscal 2013. This goal was achieved and, accordingly, 25% of the target awards vested on December 12, 2013, December 8, 2014, and December 8, 2015, respectively, and the remaining 25% vested subsequent to fiscal year end on December 8, 2016.
- (4) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as the NEO provides continuous services to us. Accordingly, 6.25% of the underlying shares for these stock options became exercisable on March 12, 2014 and 6.25% became and, so long as the NEO provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on December 12, 2017.
- (5) These restricted stock unit awards were eligible to vest in four equal annual installments only upon achievement of pre-established performance goals, namely the achievement of \$392.7 million of non-GAAP net income for fiscal 2014. This goal was achieved and, accordingly, 25% of the target awards vested on December 12, 2014, December 8, 2015, and subsequent to fiscal year end on December 8, 2016, respectively, and the remaining 25% are scheduled to vest on December 8, 2017, so long as the NEO provides continuous services to us.
- (6) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as the NEO provides continuous services to us. Accordingly, 6.25% of the underlying shares for these stock options became exercisable on March 12, 2015 and 6.25% became and, so long as the NEO provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on December 12, 2018.
- (7) These restricted stock unit awards were eligible to vest in four equal annual installments only upon achievement of pre-established performance goals, namely the achievement of \$414.0 million of non-GAAP net income for fiscal 2015. This goal was achieved and, accordingly, 25% of the target awards vested on December 15, 2015 and subsequent to fiscal year end on December 8, 2016, respectively, and the remaining 50% are scheduled to vest in two equal annual installments beginning on December 8, 2017, so long as the NEO provides continuous services to us.
- (8) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as the NEO provides continuous services to us. Accordingly, 6.25% of the underlying shares for these stock options became exercisable on March 15, 2016 and 6.25% became and, so long as the NEO provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on December 15, 2019.
- (9) These restricted stock unit awards were eligible to vest in four equal annual installments only upon achievement of pre-established performance goals, namely the achievement of \$454.0 million of non-GAAP net income for fiscal 2016 as further described in the "Compensation Discussion and Analysis" section above, under the subsection titled "Equity Awards." This goal was achieved and, accordingly, 25% of the target awards vested subsequent to the fiscal year end on December 15, 2016, and the remaining 75% are scheduled to vest in three equal annual installments beginning on December 8, 2017, so long as the NEO provides continuous services to us.
- (10) This restricted stock unit award vests in four equal annual installments beginning on December 8, 2013. Accordingly, 25% of this award vested on December 8, 2013, December 8, 2014, and December 8, 2015, respectively, and the remaining 25% vested subsequent to fiscal year end on December 8, 2016.
- (11) This restricted stock unit award vests in four equal annual installments beginning on June 15, 2014. Accordingly, 25% of this award vested on June 15, 2014, June 15, 2015, and June 15, 2016, respectively, and the remaining 25% are scheduled to vest on June 15, 2017, so long as Mr. Pham provides continuous services to us.
- (12) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as Mr. Pham provides continuous services to us. Accordingly, 6.25% of the underlying shares for this stock option became exercisable on August 24, 2013 and 6.25% became and, so long as the NEO provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on May 24, 2017.
- (13) Option vests over four years at a rate of 6.25% on the third monthly anniversary of the grant date and 6.25% per quarter thereafter, so long as Mr. Pham provides continuous services to us. Accordingly, 6.25% of the underlying shares for this stock option became exercisable on August 23, 2014 and 6.25% became and, so long as the NEO provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on May 23, 2018.
- (14) This restricted stock unit award vests in four equal annual installments beginning on June 15, 2015. Accordingly, 25% of this award vested on June 15, 2015 and June 15, 2016, respectively, and the remaining 50% are scheduled to vest in two equal annual installments beginning on June 15, 2017, so long as Mr. Pham provides continuous services to us.
- (15) Option vests as to 25% of the shares subject to the option on the one-year anniversary of the grant date and as to 6.25% of such shares per quarter thereafter. Accordingly, 25% of the underlying shares for these stock options became exercisable on May 23, 2015, and 6.25% became, and so long as Mr. Runkel provides continuous services to us, will become, exercisable quarterly thereafter until fully vested on May 23, 2018.
- (16) This restricted stock unit award vests in three equal annual installments beginning on June 15, 2015. Accordingly, two-third of this award vested on June 15, 2016, and the remaining one-third is scheduled to vest on June 15, 2017, so long as Mr. Runkel provides continuous services to us.

## Option Exercises and Stock Vested in Fiscal 2016

The following table provides information with respect to all stock options exercised and the value realized upon exercise, and all stock awards vested and the value realized upon vesting, by our NEOs during fiscal 2016.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Number of Shares Acquired on Vesting #(2)	Value Realized on Vesting (\$)(3)
Aart J. de Geus	200,000	\$6,368,106	46,091	\$2,117,612
Chi-Foon Chan	35,000	695,489	41,091	1,887,212
Trac Pham	—	—	7,252	361,856
Brian M. Beattie	133,125	3,353,862	15,841	727,198
Joseph W. Logan	—	—	17,325	794,830
John F. Runkel, Jr.	25,000	396,598	7,136	359,261

- (1) The value realized on exercise equals the difference between (a) either (i) the actual sales price of our common stock underlying the options exercised if the shares were immediately sold or (ii) the closing price per share of our common stock as reported on the NASDAQ Global Select Market on the date of exercise if the shares were held and (b) the applicable exercise price of such stock options.
- (2) Such number of shares represents the gross number of shares acquired by the NEO on the vesting date. Synopsys withholds shares for tax purposes and the NEO actually receives a smaller number of shares.
- (3) The value realized on vesting equals the closing price per share of our common stock as reported on the NASDAQ Global Select Market on the vesting date multiplied by the gross number of shares acquired on vesting as described above in note (2).

## Non-Qualified Deferred Compensation

We maintain a non-qualified deferred compensation program for a select group of management and highly compensated employees so that an eligible employee may elect, on a prospective basis, to defer the receipt of a portion of the compensation they receive from us. The program is administered under two plans: the Synopsys Deferred Compensation Plan (Deferred Compensation Plan I) and the Synopsys Amended and Restated Deferred Compensation Plan II (Deferred Compensation Plan II). The amount of earnings (or losses) that accrue to a participant's account under either the Deferred Compensation Plan I or the Deferred Compensation Plan II depends on the performance of investment alternatives selected by the participant. The investment alternatives under both plans consist of various investment funds that are generally consistent with the investment opportunities provided to our employees under our 401(k) plan, which are selected and monitored by our Deferred Compensation Plans Committee. Therefore, we do not regard the returns from these investment alternatives as above-market or preferential. We do not supplement or guarantee the returns on amounts deferred under either plan. We have entered into a trust agreement, with a third-party provider acting as trustee, to hold certain funds in connection with the program. All funds held in the trust are subject to the claims of our creditors.

The Deferred Compensation Plan I administers the elective deferrals made by eligible employees, including Dr. Chan, prior to January 1, 2005. No further contributions may be made to the Deferred Compensation Plan I; however, gains and losses and distributions and withdrawals continue to be processed on existing account balances in accordance with the terms of the Deferred Compensation Plan I as of December 31, 2004. All accrued balances maintained under the Deferred Compensation Plan I are fully vested. Amounts may be withdrawn from the plan pursuant to elections made by the participants in accordance with the terms of the Deferred Compensation Plan I, including elective withdrawals subject to a 10% forfeiture.

The Deferred Compensation Plan II was originally adopted in 2005 in order to comply with Section 409A of the Internal Revenue Code, and currently allows the deferral by eligible employees of up to 50% of salary and 100% of cash incentive compensation. All account balances maintained under the Deferred Compensation Plan II are currently fully vested. However, we may, at our discretion, make contributions in the future toward participant balances, and those contributions may be made subject to vesting. To date, no such contributions have been made. Amounts may be withdrawn or distributed from the Deferred Compensation Plan II through pre-scheduled payments or upon death, retirement, disability, separation from service or a change in control of Synopsys, as elected in advance by the plan participant in accordance with the terms of the plan. Payments may be made in the form of a lump sum payment or installments.

The following table provides certain information regarding our NEOs' participation under the Deferred Compensation Plans I and II:

Name	Executive Contributions in Fiscal 2016 (\$)(1)	Synopsys, Inc. Contributions in Fiscal 2016 (\$)	Aggregate Earnings in Fiscal 2016 (\$)(2)	Aggregate Withdrawals/Distributions in Fiscal 2016 (\$)	Aggregate Balance at End of Fiscal 2016 (\$)
Aart J. de Geus	\$ —	\$ —	\$ —	\$ —	\$ —
Chi-Foon Chan	—	—	124,960(3)	—	5,952,246(4)
Trac Pham	451,143(5)	—	76,353(6)	—	1,576,774(7)
Brian M. Beattie	379,500(5)	—	117,142(6)	—	4,366,756(8)
Joseph W. Logan	—	—	—	—	—
John F. Runkel, Jr.	202,150(5)	—	8,653(6)	—	261,750(9)

- (1) All contributions in fiscal 2016 were made under the Deferred Compensation Plan II.
- (2) Earnings from these investments are not reported as compensation in the Summary Compensation Table on page 66.
- (3) All of these aggregate earnings were accrued under the Deferred Compensation Plan I.
- (4) The entire aggregate balance was subject to the Deferred Compensation Plan I and did not include any compensation reported in the Summary Compensation Table.
- (5) Consists of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2015 though paid in fiscal 2016.
- (6) All of these aggregate earnings were accrued under the Deferred Compensation Plan II.
- (7) Includes \$451,143 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2015 though paid in fiscal 2016. The entire aggregate balance at the end of fiscal 2016 was subject to the Deferred Compensation Plan II.
- (8) Includes (a) \$379,500 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2015 though paid in fiscal 2016 and (b) \$369,000 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2014 though paid in fiscal 2015. The entire aggregate balance at the end of fiscal 2016 was subject to the Deferred Compensation Plan II.
- (9) Includes (a) \$202,150 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2015 though paid in fiscal 2016 and (b) \$49,572 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2014 though paid in fiscal 2015. The entire aggregate balance at the end of fiscal 2016 was subject to the Deferred Compensation Plan II.

## Potential Payments upon Termination of Employment or Change of Control

Set forth below is a description of potential payments to our NEOs upon a termination of employment or a change of control. For additional information regarding the arrangements for such payments, please also refer to the “Severance and Change of Control Benefits” discussion in the Compensation Discussion and Analysis section beginning on page 44.

### Potential Payments upon Involuntary Termination of Employment in Connection with a Change of Control

The table below outlines the potential payments and benefits payable to each NEO in the event of the NEO’s involuntary termination in connection with a change in control of Synopsys, as if the involuntary termination in connection with a change of control had occurred as of October 29, 2016, the last day of fiscal 2016. The payments set forth below are payable to Dr. de Geus and Dr. Chan pursuant to their employment agreements and to Mr. Pham, Mr. Beattie, Mr. Logan, and Mr. Runkel pursuant to the Executive Change of Control Severance Benefit Plan, as in effect on the last day of fiscal 2016.

In the event of an involuntary termination of their respective employment other than for cause within 24 months following a change of control of Synopsys, Dr. de Geus and Dr. Chan are each entitled to receive: (1) a lump-sum cash payment equal to two times his salary for the current fiscal year or the immediately preceding fiscal year, whichever is greater; (2) a lump-sum cash payment equal to two times his target cash incentive payment for the current fiscal year or, if there is no target cash incentive payment in effect for the current fiscal year, the highest target cash incentive payment in the preceding three fiscal years; (3) the estimated cash value of his health care premiums for 18 months, payable in a lump sum; and (4) full acceleration of all unvested stock options and other equity awards. Dr. de Geus and Dr. Chan must sign a release in order to receive benefits should a qualifying termination occur. Pursuant to their respective employment agreements, no benefits are paid if the employment termination is voluntary or for cause.

Mr. Pham, Mr. Beattie, Mr. Logan, and Mr. Runkel participate in the Executive Change of Control Severance Benefit Plan, which provides for benefits if the executive’s employment with us is terminated without cause within 30 days before or 12 months after a change of control or there is a constructive termination of the executive’s employment within 12 months after a change of control. The benefits consist of: (1) a cash severance payment equal to one year of salary, payable in four equal quarterly payments; (2) one to two times the executive’s target cash incentive payment, depending upon the timing of the termination within our fiscal year, payable in four equal quarterly payments; (3) a lump-sum cash payment equal to the estimated cost of health care premiums for 12 months; and (4) full acceleration of all unvested stock options and other equity awards held by the executive at the time of termination. An executive must sign a severance agreement and a release and, upon the written request of Synopsys or the surviving corporation in the change of control, enter into an 18-month non-competition agreement in order to receive benefits should a qualifying termination occur. The plan does not provide any benefits if the executive’s employment termination is voluntary or for cause.

Name	Salary Continuation	Cash-Based Incentive Award	Continuation of Health and Welfare Benefits	Intrinsic Value of Unvested Stock Awards(1)	Intrinsic Value of Unvested Option Awards(1)
Aart J. de Geus	\$ 1,000,000	\$ 2,200,000	\$ 17,175	\$ 5,344,416	\$ 4,761,317
Chi-Foon Chan	1,000,000	2,200,000	21,401	5,344,416	4,761,317
Trac Pham	370,000	592,000(2)	20,142	1,268,438	1,052,777
Brian M. Beattie	440,000	1,012,000(2)	14,184	1,859,960	2,035,022
Joseph W. Logan	410,000	1,230,000(2)	27,087	2,501,913	2,456,543
John F. Runkel, Jr.	350,000	490,000(2)	20,142	1,153,041	1,249,504

- (1) Amounts represent the intrinsic value of accelerated restricted stock units and stock options based upon the closing price per share of our common stock on October 28, 2016, the last trading day of fiscal 2016, of \$58.37 as reported on the NASDAQ Global Select Market.
- (2) The last day of our fiscal 2016 was Saturday, October 29, 2016. The Executive Change of Control Severance Benefit Plan provides for participants to receive their target cash incentive payment plus a prorated portion of such payment based on the number of days the participant has served during the fiscal year by the time the termination occurs. Accordingly, for purposes of determining the amount of the cash-based incentive awards payable to Mr. Pham, Mr. Beattie, Mr. Logan, and Mr. Runkel in the event of their terminations in connection with a change of control as of October 31, 2016, each would be entitled to two times his target cash incentive payment, given that each would have worked the entirety of fiscal 2016 as of such date.

### Potential Payments upon a Change of Control

Pursuant to our equity plans, all of our employees receive full acceleration of the vesting of any unvested stock options or stock awards in the event that such equity awards are not assumed, continued or substituted by the surviving or acquiring company following a change of control of Synopsys. The table below outlines the potential payments and benefits payable to each NEO in the event of a change in control of Synopsys in which equity awards are not assumed, continued or substituted, as if the change of control had occurred as of October 29, 2016, the last day of fiscal 2016. Vesting acceleration of equity awards if such equity awards are not assumed, continued or substituted is the only benefit provided to our NEOs in the event of a change of control in which the executive is not involuntarily terminated.

Name	Salary Continuation	Cash-Based Incentive Award	Continuation of Health and Welfare Benefits	Intrinsic Value of Unvested Stock Awards(1)	Intrinsic Value of Unvested Option Awards(1)
Aart J. de Geus	\$ —	\$ —	\$ —	\$ 5,344,416	\$ 4,761,317
Chi-Foon Chan	—	—	—	5,344,416	4,761,317
Trac Pham	—	—	—	1,268,438	1,052,777
Brian M. Beattie	—	—	—	1,859,960	2,035,022
Joseph W. Logan	—	—	—	2,501,913	2,456,543
John F. Runkel, Jr.	—	—	—	1,153,041	1,249,504

- (1) Amounts represent the intrinsic value of accelerated restricted stock units and stock options based upon the closing price per share of our common stock on October 28, 2016, the last trading day of fiscal 2016, of \$58.37 as reported on the NASDAQ Global Select Market.

## Potential Payments upon Involuntary Termination of Employment

Dr. de Geus and Dr. Chan are the only NEOs who are entitled to severance benefits in the event their employment is involuntarily terminated not in connection with a change of control. No benefits are paid if their termination is for cause or is a voluntary termination without good reason. "Cause" and "good reason" are defined in Dr. de Geus and Dr. Chan's respective employment agreements. The table below outlines the potential amounts payable to each NEO in the event of such an involuntary termination, as if such event had occurred as of October 29, 2016, the last day of fiscal 2016. Pursuant to their respective employment agreements, Dr. de Geus and Dr. Chan would each receive: (1) a lump-sum cash payment equal to his salary during the fiscal year or immediately preceding fiscal year, whichever is greater; (2) a lump-sum cash payment equal to the target cash incentive payment then in effect or, if there is no target cash incentive payment in effect for such year, the highest target cash incentive payment in the three preceding years; and (3) the estimated cash value of his health care premiums for 12 months, payable in a lump sum. Dr. de Geus and Dr. Chan must sign a release in order to receive benefits should a qualifying termination occur.

Name	Salary Continuation	Cash-Based Incentive Award	Continuation of Health and Welfare Benefits	Intrinsic Value of Unvested Stock Awards(1)	Intrinsic Value of Unvested Option Awards(1)
Aart J. de Geus	\$ 500,000	\$ 1,100,000	\$ 11,385	\$ —	\$ —
Chi-Foon Chan	500,000	1,100,000	14,184	—	—
Trac Pham	—	—	—	—	—
Brian M. Beattie	—	—	—	—	—
Joseph W. Logan	—	—	—	—	—
John F. Runkel, Jr.	—	—	—	—	—

## Equity Compensation Plan Information

The following table provides information regarding our equity compensation plans as of October 29, 2016.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights(1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights(2)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans(3)
Equity Compensation Plans Approved by Stockholders	10,436(4)	\$ 40.10	20,150(5)
Equity Compensation Plans Not Approved by Stockholders(6)	—	—	—
<b>Total</b>	<b>10,436</b>	<b>\$ 40.10</b>	<b>20,150</b>

- (1) Number of securities in thousands.
- (2) The weighted-average exercise price does not include outstanding restricted stock units, which have no exercise price.
- (3) Number of securities in thousands. These numbers exclude the shares listed under the column heading "Number of Shares to be Issued upon Exercise of Outstanding Options, Warrants and Rights."
- (4) Includes 4.0 million shares of common stock issuable upon vesting of restricted stock units under the 2006 Employee Plan and vesting of restricted stock awards under the 2005 Non-Employee Directors Equity Incentive Plan, and 6.4 million shares of common stock issuable upon exercise of outstanding stock options granted under the 2006 Employee Plan and the 2005 Non-Employee Directors Equity Incentive Plan.
- (5) Comprised of (a) 11.3 million shares remaining available for issuance under the 2006 Employee Plan, (b) 0.2 million shares remaining available for issuance under the 2005 Non-Employee Directors Equity Incentive Plan, and (c) 8.7 million shares remaining available for issuance under the Employee Stock Purchase Plan as of October 29, 2016.
- (6) Does not include 0.4 million shares of common stock issuable upon exercise of outstanding stock options, with a weighted-average exercise price of \$30.44 per share, under various plans assumed in connection with acquisitions of other companies. No shares remain available for future issuance under these acquired plans.

## Proposal 6 — Ratification of Selection of Independent Registered Public Accounting Firm

The Audit Committee of our Board of Directors has selected KPMG LLP, our independent registered public accounting firm, to audit our consolidated financial statements for fiscal 2017. KPMG LLP has audited our consolidated financial statements since fiscal 1992. As a matter of good corporate governance, we are asking our stockholders to ratify the Audit Committee’s selection of KPMG LLP as our independent registered public accounting firm for fiscal 2017.

We expect that a KPMG LLP representative will be present at the Annual Meeting, will have the opportunity to make a statement if he or she desires to do so, and will be available to respond to appropriate questions.

Ratification of the selection of KPMG LLP requires that the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting, and voting on this Proposal 6, vote “For” this Proposal 6. Abstentions will not be counted as either votes cast “For” or “Against” this Proposal 6. Discretionary votes by brokers, banks and related agents on this routine proposal will be counted towards the quorum requirement and will affect the outcome of the vote.

Stockholder ratification of the appointment of KPMG LLP as our independent registered public accounting firm is not required by our Bylaws or otherwise. Nevertheless, our Board of Directors is submitting the selection of KPMG LLP to our stockholders for ratification. If our stockholders do not ratify the selection, the Audit Committee will reconsider whether or not to retain KPMG LLP. Even if the selection is ratified, the Audit Committee in its discretion may direct the selection of a different independent registered public accounting firm at any time if they determine that such a change would be in the best interests of Synopsys and our stockholders.

**Our Board of Directors Recommends that You Vote FOR the Ratification of the Selection of KPMG LLP to Serve as Our Independent Registered Public Accounting Firm for Fiscal 2017**

### Fees and Services of Independent Registered Public Accounting Firm

The following table presents fees for professional audit services rendered by KPMG LLP for the audit of our annual financial statements and fees billed for all other services rendered by KPMG LLP during the following fiscal years.

	Fiscal Year Ended	
	Oct. 29, 2016 (in thousands)	Oct. 31, 2015 (in thousands)
Audit fees	\$ 2,808	\$ 3,275
Audit-related fees(1)	537	232
Tax fees(2)	123	105
<b>Total fees</b>	<b>\$ 3,467</b>	<b>\$ 3,612</b>

(1) Consists of fees for due diligence services.

(2) Consists of fees for assistance with international tax compliance services relating to certain foreign subsidiaries.

### Audit Committee Pre-Approval Policies and Procedures

As required by Section 10A(i)(1) of the Exchange Act, all audit and non-audit services to be performed by our independent registered public accounting firm must be approved in advance by the Audit Committee, subject to certain exceptions relating to non-audit services accounting for less than five percent of the total fees paid to our independent registered public accounting firm which are subsequently ratified by the

Audit Committee (referred to in this Proposal 6 as the De Minimis Exception). In addition, pursuant to Section 10A(i)(3) of the Exchange Act, as amended, the Audit Committee has established procedures by which the Chairperson of the Audit Committee may pre-approve such services, provided the Chairperson subsequently reports the details of the services to the full Audit Committee. None of the non-audit services performed by KPMG LLP during fiscal 2016 or fiscal 2015 were performed pursuant to the De Minimis Exception.

## Audit Committee Report\*

As more fully described in its written charter, the Audit Committee acts on behalf of the Board to perform financial oversight responsibilities relating to (1) the integrity of Synopsys' financial statements, financial reporting processes and systems of internal accounting and financial controls, (2) Synopsys' internal audit function, which reports to the Audit Committee and management and is responsible for independently and objectively assessing Synopsys' financial and business processes and controls, including controls related to the integrity and reliability of financial information, (3) the annual independent audit of Synopsys' financial statements, (4) the engagement of Synopsys' independent registered public accounting firm and evaluation of their performance and independence, (5) compliance with legal and regulatory requirements that pertain to Synopsys' financial statements, internal controls over financials reporting, and disclosure controls, and (6) evaluation of enterprise risk issues. The Audit Committee has the authority to retain, at Synopsys' expense, special legal, accounting or other advisors or consultants as it deems necessary or appropriate in the performance of its duties. It also has the authority to require that any of Synopsys' personnel, counsel, independent auditors or investment bankers, or other Synopsys advisors, attend any meeting of the Audit Committee or meet with any member of the Audit Committee or any of its consultants.

In fiscal 2016, the Audit Committee was composed of four non-employee directors, each considered independent under the applicable requirements of the Securities and Exchange Commission and the listing standards of the NASDAQ Global Select Market. In addition, the Board has determined that Mr. Castino, Ms. Coleman and Mr. Vallee each qualifies as an "audit committee financial expert" within the meaning of the regulations of the Securities and Exchange Commission.

The Audit Committee's function is not intended to duplicate or certify the actions of management or Synopsys' independent auditors. Management is responsible for the preparation, presentation, and integrity of Synopsys' financial statements and the effectiveness of Synopsys' internal control over financial reporting. Synopsys' independent auditors are responsible for expressing an opinion as to the conformity of Synopsys' consolidated financial statements with generally accepted accounting principles and as to the effectiveness of Synopsys' internal control over financial reporting. The Audit Committee provides Board-level oversight, advising and directing management and the independent auditors on the basis of the information presented to the Committee, the Committee's discussions with management and the auditors, and the Committee members' business and financial experience.

The Audit Committee met ten times during fiscal 2016. Its agenda included reviewing Synopsys' financial statements, internal control over financial reporting, and audit and other matters. The Audit Committee met with Synopsys' internal auditors and independent auditors, with and without management present, to discuss the scope, plan, status, and results of their respective audits. In addition, the Audit Committee met with management and the independent auditors each quarter to review Synopsys' interim financial results and quarterly earnings press releases prior to their issuance. The Audit Committee also reviewed Synopsys' Quarterly Reports on Form 10-Q and Annual Report on Form 10-K prior to their filing with the Securities and Exchange Commission. At quarterly meetings, the Audit Committee reviewed and discussed with management, and management gave presentations regarding, Synopsys' financial reporting and controls, investments, financing activities, taxes, insurance, and information technology and data security, and related risks, as well as other topics with potential significant financial impact. The Audit Committee oversaw Synopsys' anonymous and confidential ethics reporting system, which encourages and allows employees to submit concerns directly to senior management and the Audit Committee.

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\* This report shall not constitute "soliciting material," shall not be deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference into any of our other filings under the Securities Act of 1933 or the Exchange Act, except to the extent we specifically incorporate this report by reference therein.

## **Communications with Management and Independent Registered Public Accounting Firm**

The Audit Committee has reviewed and discussed our audited financial statements with management. In addition, the Audit Committee has discussed with KPMG LLP, Synopsys' independent registered public accounting firm, the matters required to be discussed by Auditing Standard No. 16, *Communications with Audit Committees*, which includes, among other items, matters related to the conduct of the audit of our financial statements. The Audit Committee has also received the written disclosures and letter from KPMG LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding KPMG LLP's communications with the Audit Committee concerning independence. The Audit Committee has discussed with KPMG LLP and reviewed KPMG LLP's independence from Synopsys, including whether KPMG LLP's provision of non-audit services was compatible with that independence.

## **Recommendation Regarding Financial Statements**

Based on the review and discussions referred to above, the Audit Committee unanimously recommended to our Board that Synopsys' audited fiscal 2016 financial statements be included in our 2016 Annual Report on Form 10-K.

### **AUDIT COMMITTEE\*\***

Deborah A. Coleman, Chair  
Alfred Castino  
Janice D. Chaffin  
Roy Vallee

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\*\* Mercedes Johnson was appointed to our Audit Committee in February 2017, and thus, did not participate in the discussion to recommend the inclusion of the audited fiscal 2016 financial statements in our 2016 Annual Report on Form 10-K.

## Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of January 23, 2017 by (1) each person known by us to beneficially own more than five percent of our common stock outstanding on that date, (2) each of our directors, (3) each of our NEOs, and (4) all of our directors and executive officers as a group. Unless otherwise indicated, each entity or person listed below maintains a mailing address of c/o Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043.

Name of Beneficial Owner(1)	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Shares(2)	Additional Information
<b>Entities associated with Blackrock, Inc.</b> 55 E. 52 <sup>nd</sup> Street New York, NY 10055	16,411,797	10.91%	Based solely on the Schedule 13G/A filed with the Securities and Exchange Commission on January 17, 2017, reporting beneficial ownership as of December 31, 2016. Blackrock, Inc. has sole dispositive power with respect to all such shares and sole voting power with respect to 14,995,723 shares.
<b>Entities associated with The Vanguard Group, Inc.</b> 100 Vanguard Blvd. Malvern, PA 19355	12,358,253	8.22%	Based solely on the Schedule 13G/A filed with the Securities and Exchange Commission on February 10, 2017, reporting beneficial ownership as of December 31, 2016. The Vanguard Group has sole dispositive power with respect to 12,191,475 shares, shared dispositive power with respect to 166,778 shares, sole voting power with respect to 125,115 shares and shared voting power with respect to 45,978 shares.
<b>Entities associated with Dodge &amp; Cox</b> 555 California Street, 40 <sup>th</sup> Floor San Francisco, CA 94104	11,520,675	7.66%	Based solely on the Schedule 13G/A filed with the Securities and Exchange Commission on February 14, 2017, reporting beneficial ownership as of December 31, 2016. Dodge & Cox has sole dispositive power with respect to all such shares and sole voting power with respect to 10,732,433 shares.
<b>Brian M. Beattie</b> Executive Vice President, Business Operations and Chief Administrative Officer	164,918	*	Includes stock options to purchase 125,317 shares exercisable by Mr. Beattie within 60 days following January 23, 2017.
<b>Alfred Castino</b> Director	33,440	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Janice D. Chaffin</b> Director	27,827	*	Includes stock options to purchase 18,166 shares exercisable by Ms. Chaffin within 60 days following January 23, 2017. Also includes 4,382 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Chi-Foon Chan</b> Co-Chief Executive Officer, President and Director	542,807	*	Includes stock options to purchase 331,321 shares exercisable by Dr. Chan within 60 days following January 23, 2017.
<b>Bruce R. Chizen</b> Director	36,277	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Deborah A. Coleman</b> Director	34,477	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Aart J. de Geus</b> Co-Chief Executive Officer and Chairman of the Board of Directors	1,265,489	*	Includes stock options to purchase 650,346 shares exercisable by Dr. de Geus within 60 days following January 23, 2017. Also includes 18,500 shares owned by Mora Investment Partners L.P.

Name of Beneficial Owner(1)	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Shares(2)	Additional Information
<b>Mercedes Johnson</b> Director	—	—	Ms. Johnson was appointed to our Board in February 2017 and did not beneficially own any shares of our common stock as of January 23, 2017.
<b>Joseph W. Logan</b> Executive Vice President, Worldwide Sales and Corporate Marketing	308,265	*	Includes stock options to purchase 229,472 shares exercisable by Mr. Logan within 60 days following January 23, 2017.
<b>Chrysostomos L. “Max” Nikias</b> Director	65,471	*	Includes stock options to purchase 42,147 shares exercisable by Dr. Nikias within 60 days following January 23, 2017. Also includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Trac Pham</b> Chief Financial Officer	74,912	*	Includes stock options to purchase 61,620 shares exercisable by Mr. Pham within 60 days following January 23, 2017.
<b>John F. Runkel, Jr.</b> General Counsel and Corporate Secretary	49,052	*	Includes stock options to purchase 38,150 shares exercisable by Mr. Runkel within 60 days following January 23, 2017.
<b>John Schwarz</b> Director	43,825	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Roy Vallee</b> Director	63,277	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
<b>Steven C. Walske</b> Director	31,612	*	Includes 5,458 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.
All directors and executive officers as a group (15 persons)	2,741,649	1.82%	Includes stock options to purchase 1,504,039 shares exercisable by all directors and executive officers within 60 days following January 23, 2017. Also includes 42,588 shares of restricted stock that are not vested as of January 23, 2017 and are subject to forfeiture.

\* Less than 1%

- (1) Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Except as indicated in the “Additional Information” column, and subject to community property laws where applicable, we believe, based on information furnished by such persons and from Schedules 13D and 13G filed with the Securities and Exchange Commission, that the persons named in the table above have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them as of January 23, 2017.
- (2) Percentage of beneficial ownership is based on 150,401,244 shares of common stock outstanding as of January 23, 2017, adjusted as required by Securities and Exchange Commission rules. Shares of common stock that are subject to stock options or other convertible securities currently issuable or issuable into shares of common stock within 60 days of January 23, 2017, are deemed outstanding for the purposes of computing the percentage ownership of the person holding these stock options or convertible securities, but are not deemed outstanding for computing the percentage ownership of any other person.

## Section 16(a) Beneficial Ownership Reporting Compliance

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

Based solely on our review of the copies of the Forms 3, 4 and 5 filed by or received from our reporting persons (or written representations received from such persons), we believe that all of the Section 16 filing requirements were satisfied during fiscal 2016.

## About the Annual Meeting

### Why did I receive a notice about Synopsys, Inc.'s proxy materials?

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Since you owned common stock of Synopsys, Inc. at the close of business on February 10, 2017, the Record Date, you are considered a stockholder. Our Board of Directors is soliciting proxies for the Annual Meeting. Accordingly, we are providing you with access to our proxy materials in order to solicit your vote at the Annual Meeting.

The Notice of Internet Availability of Proxy Materials, this Proxy Statement, the accompanying proxy card or voting instruction form and our 2016 Annual Report on Form 10-K were distributed and made available on or about February 21, 2017.

### Why did I receive a two-page notice instead of the proxy materials themselves, and how can I get the materials?

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We are pleased to continue to take advantage of the Securities and Exchange Commission rule that allows companies to furnish proxy materials to their stockholders over the Internet. As a result, we are mailing to most of our stockholders a two-page Notice of Availability of Proxy Materials instead of a printed copy of all of the proxy materials.

The Notice of Availability of Proxy Materials you received provides instructions on how to access our proxy materials and submit your vote on the Internet and also instructs you on how to request a printed copy of our proxy materials. We believe this process of sending a two-page notice reduces the environmental impact of printing and distributing hard copy materials and lowers our costs.

### Why did I receive a full set of proxy materials in the mail instead of a two-page notice?

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If you previously requested printed copies of the proxy materials, we have provided you with printed copies of the proxy materials instead of a two-page Notice of Availability of Proxy Materials. If you would like to reduce the environmental impact and the costs incurred by us in mailing proxy materials, you may elect to receive all future proxy materials electronically via email or the Internet.

To sign up for electronic delivery, please follow the instructions to vote using the Internet provided with your proxy materials and on your proxy card or voting instruction form, and, when prompted, indicate that you agree to receive or access stockholder communications electronically in the future.

## What proposals will be presented at the Annual Meeting and what are the voting recommendations of the Board of Directors?

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The proposals that will be presented at the Annual Meeting and our Board's voting recommendations are set forth in the table below:

Proposal	Board's Voting Recommendation
1. To elect ten directors nominated by our Board of Directors to hold office until the next annual meeting of stockholders or until their successors have been elected	<b>FOR all nominees</b>
2. To approve our 2006 Employee Equity Incentive Plan, as amended, in order to, among other items, increase the number of shares available for issuance under the plan by 5,000,000 shares	<b>FOR</b>
3. To approve our 2017 Non-Employee Directors Equity Incentive Plan	<b>FOR</b>
4. To approve, on an advisory basis, the frequency with which to hold an advisory vote on executive compensation	<b>1 Year</b>
5. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the Proxy Statement	<b>FOR</b>
6. To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending October 28, 2017	<b>FOR</b>

We will also consider any other business that properly comes before the Annual Meeting. As of the Record Date, we are not aware of any other matters to be submitted for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, the persons named in the enclosed proxy card or voting instruction form will vote the shares they represent using their best judgment.

## When and where will the Annual Meeting be held?

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The Annual Meeting will be held on April 6, 2017, at 8:00 a.m. Pacific Time at our office located at 1030 West Maude Avenue, Sunnyvale, California 94085. A map and directions are provided on the back of this Proxy Statement.

## How can I attend the Annual Meeting?

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You will be admitted to the Annual Meeting if you were a Synopsys stockholder or joint holder as of the close of business on February 10, 2017, or you have authority to vote under a valid proxy for the Annual Meeting.

You should be prepared to present photo identification for admittance. In addition, if you are a stockholder of record, your name will be verified against the list of stockholders of record prior to admittance to the Annual Meeting. If you are a beneficial owner, you should provide proof of beneficial ownership on the Record Date, such as an account statement covering February 10, 2017, a copy of the voting instruction form provided by your broker, trustee, or nominee, or other similar evidence of ownership. If you are a stockholder who is a natural person and not an entity, you and your immediate family members will be admitted to the Annual Meeting, provided you and they comply with the above procedures.

## Who can vote?

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If you are a stockholder of record or a beneficial owner who owned our common stock at the close of business on the Record Date of February 10, 2017, you are entitled to attend and vote at the Annual Meeting. For further details on how to vote, please see the questions below.

As of the Record Date, 150,475,423 shares of our common stock were outstanding and entitled to vote. You are entitled to one vote for each share of common stock you held on the Record Date. The names of stockholders of record entitled to vote at the Annual Meeting will be available to

stockholders entitled to vote for ten days prior to the Annual Meeting for any purpose relevant to the Annual Meeting. This list can be viewed between the hours of 9:00 a.m. and 5:00 p.m. at our principal executive offices at 690 East Middlefield Road, Mountain View, California 94043.

Whether or not you plan to attend the Annual Meeting, we urge you to submit your proxy.

### **What is the difference between a stockholder of record and a beneficial owner?**

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- **Stockholder of Record:** If on the Record Date your shares were registered directly in your name with our transfer agent, Computershare Investor Services, then you are a stockholder of record.
- **Beneficial Owner:** If on the Record Date your shares were held through a broker, bank, or other agent and not in your name, then you are the beneficial owner of our common stock. If you are a beneficial owner, your shares are held in street name, as is the case for most of our stockholders.

### **How can I vote if I am a stockholder of record?**

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There are four ways to vote:

- **In person.** If you are a stockholder of record, you may vote in person at the Annual Meeting. We will provide a ballot to you when you arrive.
- **Via the Internet.** You may vote by proxy via the Internet by following the instructions provided in the proxy card or Notice of Availability of Proxy Materials.
- **By Telephone.** If you received printed copies of the proxy materials, you may vote by proxy by calling the toll free number found on the proxy card. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy over the telephone, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then calling the toll free number found on the proxy card.
- **By Mail.** If you received printed copies of the proxy materials, you may vote by proxy by filling out the proxy card and sending it back in the envelope provided. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy via mail, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then filling out the proxy card and sending it back in the envelope provided.

Whether or not you plan to attend the meeting, we urge you to vote by proxy.

### **How can I vote if I am the beneficial owner?**

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There are four ways to vote:

- **In person.** If you are a beneficial owner and you wish to vote in person at the Annual Meeting, you must obtain a legal proxy from the organization that holds your shares. Please contact that organization for instructions regarding obtaining a legal proxy.
- **Via the Internet.** You may vote by proxy via the Internet by following the instructions provided in the voting instruction form or Notice of Availability of Proxy Materials.
- **By Telephone.** If you received printed copies of the proxy materials, you may vote by proxy by calling the toll free number found on the voting instruction form. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy over the telephone, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then calling the toll free number found on the voting instruction form.

- **By Mail.** If you received printed copies of the proxy materials, you may vote by proxy by filling out the voting instruction form and sending it back in the envelope provided. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy via mail, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then filling out the voting instruction form and sending it back in the envelope provided.

As a beneficial owner, you are also invited to attend the Annual Meeting. However, since you are not a stockholder of record, you may not vote your shares in person at the Annual Meeting unless you request and obtain a legal proxy from the organization that holds your shares.

## What votes can I cast for the proposals?

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- **Proposal 1.** You may either vote “For” all the nominees to our Board of Directors or you may “Withhold” your vote for any nominee you specify.
- **Proposals 2, 3, 5 and 6.** You may vote “For” or “Against,” or “Abstain” from voting. An abstention will not be counted as either a vote cast “For” or “Against.”
- **Proposal 4.** You may vote for “1 Year,” “2 Years,” or “3 Years,” or “Abstain” from voting.

## What if I don’t give specific voting instructions?

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If you indicate a choice on your proxy on a particular matter to be acted upon, the shares will be voted as indicated. If you are a stockholder of record and you return a signed proxy card but do not indicate how you wish to vote, the proxy holders will vote your shares in the manner recommended by our Board of Directors on all matters presented in this Proxy Statement and as the proxy holders may determine in their discretion with respect to any other matters properly presented for a vote at the Annual Meeting. If you do not return the proxy card, your shares will not be voted and will not be deemed present for the purpose of determining whether a quorum exists.

If you are a beneficial owner and the organization holding your account does not receive instructions from you as to how to vote those shares, under the rules of various national and regional securities exchanges, that organization may exercise discretionary authority to vote on routine proposals but may not vote on non-routine proposals. As a beneficial owner, you will not be deemed to have voted on such non-routine proposals. The shares that cannot be voted by brokers on non-routine matters are called broker non-votes. Broker non-votes will be deemed present at the Annual Meeting for purposes of determining whether a quorum exists for the Annual Meeting. Broker non-votes will make a quorum more readily obtainable but will not otherwise affect the outcome of the vote of any proposal.

## Which proposals in this Proxy Statement are considered “routine” or “non-routine”?

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The ratification of the appointment of KPMG LLP as our independent registered public accounting firm for fiscal 2017 (Proposal 6) is a matter considered routine under applicable rules. A broker or other nominee may generally vote on routine matters, and therefore no broker non-votes are expected to exist in connection with Proposal 6.

The election of directors (Proposal 1), the proposal to approve our 2006 Employee Equity Incentive Plan, as amended (Proposal 2), the proposal to approve our 2017 Non-Employee Directors Equity Incentive Plan (Proposal 3), the advisory vote to approve the frequency of executive compensation advisory votes (Proposal 4), and the advisory vote to approve executive compensation (Proposal 5) are matters considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposals 1, 2, 3, 4 and 5.

## **What if I change my mind and want to revoke my proxy?**

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If you are a stockholder of record, you may revoke your proxy at any time before the Annual Meeting by delivering a written notice of revocation or a duly executed proxy card bearing a later date to our principal executive offices at 690 East Middlefield Road, Mountain View, California 94043, attention Corporate Secretary. Such notice or later dated proxy must be received by us prior to the Annual Meeting. You may also revoke your proxy by attending the Annual Meeting and voting in person.

If you are a beneficial owner, please contact your broker, bank or other agent for instructions on how to revoke your proxy.

## **What is a quorum?**

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We need a quorum of stockholders to hold our Annual Meeting. A quorum exists when at least a majority of the outstanding shares entitled to vote as of the Record Date are represented at the Annual Meeting either in person or by proxy. Your shares will be counted towards the quorum only if a valid proxy or vote is submitted. Stockholders who vote "Abstain" on any proposal and discretionary votes by brokers, banks and related agents on routine proposals will be counted towards the quorum requirement.

## **Who is paying for this solicitation?**

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Synopsys will bear the cost of soliciting proxies. We have retained D.F. King & Co., Inc. to assist us in soliciting proxies, for which we will pay D.F. King & Co., Inc. a fee of approximately \$11,500 plus out-of-pocket expenses. We will also reimburse brokerage firms and other persons representing beneficial owners of shares for their reasonable expenses in forwarding solicitation material to such beneficial owners. We will furnish copies of solicitation material to such brokerage firms and other representatives. Proxies may also be solicited personally or by telephone, facsimile or email by our directors, officers and employees without additional compensation.

## **I received notice that communications to my address are being householded. What does that mean?**

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The Securities and Exchange Commission has adopted rules that permit companies and intermediaries (for example, brokers) to satisfy the delivery requirements for proxy statements and annual reports with respect to two or more stockholders sharing the same address by delivering a single proxy statement or Notice of Availability of Proxy Materials addressed to those stockholders. A number of brokers with account holders who are our stockholders "household" our proxy materials in this manner.

If you have received notice from your broker that it will be householding communications to your address, householding will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in householding and would prefer to receive a separate proxy statement, 2016 Annual Report on Form 10-K or Notice of Availability of Proxy Materials, please notify your broker and our investor relations department in writing at 690 East Middlefield Road, Mountain View, California 94043, by email at [invest-info@synopsys.com](mailto:invest-info@synopsys.com) or by telephone at (650) 584-4257. If you currently receive multiple copies of the Notice of Availability of Proxy Materials or proxy statement at your address and would like to request householding of your communications, please contact your broker, bank or other agent.

## **I also have access to Synopsys, Inc.'s 2016 Annual Report on Form 10-K. Is that a part of the proxy materials?**

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Our Annual Report on Form 10-K for the fiscal year ended October 31, 2016, as filed with the Securities and Exchange Commission on December 9, 2016, accompanies this Proxy Statement. These documents constitute our Annual Report to Stockholders and are being made available to all stockholders entitled to receive notice of and to vote at the Annual Meeting. Except as otherwise stated, the 2016 Annual Report on Form 10-K is not incorporated into this Proxy Statement and should not be considered proxy solicitation material.

## **Where can I find the voting results of the meeting?**

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The preliminary voting results will be announced at the Annual Meeting. The final results will be published in a Current Report on Form 8-K, which we will file with the Securities and Exchange Commission after the Annual Meeting.

## **How can I make a proposal to be voted on at next year's annual meeting of stockholders?**

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To be considered for inclusion in the proxy materials for next year's annual meeting of stockholders, your proposal must be submitted in writing by October 24, 2017 to Corporate Secretary, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043, and must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended (referred to in this Proxy Statement as the Exchange Act). If you wish to submit a proposal that is not to be included in next year's proxy materials, but that may be considered at the annual meeting of stockholders to be held in 2018, you must do so in writing following the above instructions not earlier than the close of business on September 24, 2017 and not later than the close of business on October 24, 2017. We advise you to review our Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations, including the different notice submission date requirements in the event our annual meeting for 2018 is held more than 30 days before or after April 6, 2018. The section titled "Director Nominations" on page 15 of this Proxy Statement provides additional information on the director nomination process.

## Other Matters

We know of no other business that will be presented at the Annual Meeting. If any other business is properly brought before the Annual Meeting, it is intended that proxies in the enclosed form will be voted in accordance with the judgment of the persons voting the proxies.

Whether or not you intend to be present at the Annual Meeting, we urge you to return your signed proxy promptly.

By order of the Board of Directors,



John F. Runkel, Jr.  
*General Counsel and  
Corporate Secretary*

Dated: February 17, 2017

**A copy of our 2016 Annual Report on Form 10-K is available without charge upon written request to Corporate Secretary, Synopsys, Inc., 690 East Middlefield Road, Mountain View, California 94043.**

**Important Notice Regarding the Internet Availability of Proxy Materials  
for the Annual Meeting to Be Held on April 6, 2017**

The Proxy Statement and our 2016 Annual Report on Form 10-K will be available at  
<http://materials.proxyvote.com/871607> on or about February 21, 2017.

# Appendix A

## SYNOPSYS, INC. 2006 EMPLOYEE EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: MARCH 3, 2006  
APPROVED BY THE STOCKHOLDERS: APRIL 25, 2006  
AS AMENDED BY THE BOARD OF DIRECTORS: FEBRUARY 14, 2017  
AMENDMENT APPROVED BY THE STOCKHOLDERS: APRIL 6, 2017  
TERMINATION DATE: APRIL 1, 2026

### 1. GENERAL.

(a) **Successor and Continuation of Prior Plans.** The Plan is intended as the successor and continuation of the (i) Synopsys, Inc. 1992 Stock Option Plan, (ii) Synopsys, Inc. 1998 Nonstatutory Stock Option Plan, and (iii) Synopsys, Inc. 2005 Assumed Stock Option Plan (collectively, the “**Prior Plans**”). Following the Effective Date, no additional stock awards shall be granted under the Prior Plans. Any shares remaining available for issuance on the Effective Date under the Prior Plans became available for issuance pursuant to Stock Awards granted hereunder. Any shares subject to outstanding stock awards granted under the Prior Plans that expired or terminated for any reason prior to exercise or settlement became available for issuance pursuant to Stock Awards granted hereunder. As of January 12, 2017, no awards remained outstanding under the Prior Plans.

(b) **Eligible Award Recipients.** The persons eligible to receive Awards are Employees and Consultants. Non-employee Directors are not eligible to receive Awards under this Plan.

(c) **Available Awards.** The Plan provides for the grant of the following Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Restricted Stock Awards, (iv) Restricted Stock Unit Awards, (v) Stock Appreciation Rights, (vi) Performance Stock Awards, and (vii) Other Stock Awards. The Plan also provides for the grant of Performance Cash Awards.

(d) **Purpose.** The Company, by means of the Plan, seeks to secure and retain the services of the group of persons eligible to receive Stock Awards as set forth in Section 1(b), to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Stock Awards.

### 2. DEFINITIONS.

As used in the Plan, the following definitions shall apply to the capitalized terms indicated below:

(a) “**Affiliate**” means (i) any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, provided each corporation in the unbroken chain (other than the Company) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain, and (ii) any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. The Board shall have the authority to determine (i) the time or times at which the ownership tests are applied, and (ii) whether “**Affiliate**” includes entities other than corporations within the foregoing definition.

(b) “**Award**” means a Stock Award or a Performance Cash Award.

(c) “**Board**” means the Board of Directors of the Company.

(d) “**Capitalization Adjustment**” has the meaning ascribed to that term in Section 9(a).

(e) “**Cause**” means, with respect to a Participant, the occurrence of any of the following: (i) the Participant commits an act of dishonesty in connection with the Participant’s responsibilities as an

Employee or Consultant; (ii) the Participant commits a felony or any act of moral turpitude; (iii) the Participant commits any willful or grossly negligent act that constitutes gross misconduct and/or injures, or is reasonably likely to injure, the Company or any Affiliate; or (iv) the Participant willfully and materially violates (A) any written policies or procedures of the Company or any Affiliate, or (B) the Participant's obligations to the Company or any Affiliate. The determination that a termination is for Cause shall be made by the Company in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(f) "**Change in Control**" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person from the Company in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (B) solely because the level of Ownership held by any Exchange Act Person (the "**Subject Person**") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than fifty percent (50%) of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than fifty percent (50%) of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company shall otherwise occur;

(iv) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than fifty percent (50%) of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(v) individuals who, on the date this Plan is adopted by the Board, are members of the Board (the "**Incumbent Board**") cease for any reason to constitute at least a majority of the members of the Board; *provided, however*, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the

members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

For avoidance of doubt, the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company.

Notwithstanding the foregoing, to the extent that the Company determines that any of the payments or benefits under this Plan that are payable in connection with a Change in Control constitute deferred compensation under Section 409A that may only be paid on a transaction that meets the standard of Treasury Regulation Section 1.409A-3(a)(5), the foregoing definition of Change in Control shall apply only to the extent the transaction also meets the definition used for purposes of Treasury Regulation Section 1.409A-3(a)(5), that is, as defined under Treasury Regulation Section 1.409A-3(i)(5).

(g) “**Code**” means the Internal Revenue Code of 1986, as amended.

(h) “**Committee**” means a committee of one (1) or more members of the Board to whom authority has been delegated by the Board in accordance with Section 3(c).

(i) “**Common Stock**” means the common stock of the Company.

(j) “**Company**” means Synopsys, Inc., a Delaware corporation.

(k) “**Consultant**” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, shall not cause a Director to be considered a “Consultant” for purposes of the Plan.

(l) “**Continuous Service**” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate from a Consultant to Employee shall not terminate a Participant’s Continuous Service. Furthermore, a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, shall not terminate a Participant’s Continuous Service. However, if the corporation for which a Participant is rendering service ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant’s Continuous Service shall be considered to have terminated on the date such corporation ceases to qualify as an Affiliate. A leave of absence shall be treated as Continuous Service for purposes of vesting in an Award to such extent as may be provided in the Company’s leave of absence policy or in the written terms of the Participant’s leave of absence.

(m) “**Corporate Transaction**” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least ninety percent (90%) of the outstanding securities of the Company;

(iii) the consummation of a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) the consummation of a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

Notwithstanding the foregoing, to the extent that the Company determines that any of the payments or benefits under this Plan that are payable in connection with a Corporate Transaction constitute deferred compensation under Section 409A that may only be paid on a

transaction that meets the standard of Treasury Regulation Section 1.409A-3(a)(5), the foregoing definition of Corporate Transaction shall apply only to the extent the transaction also meets the definition used for purposes of Treasury Regulation Section 1.409A-3(a)(5), that is, as defined under Treasury Regulation Section 1.409A-3(i)(5).

(n) “**Covered Employee**” has the meaning provided in Section 162(m)(3) of the Code and the regulations promulgated thereunder.

(o) “**Director**” means a member of the Board.

(p) “**Disability**” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than twelve (12) months, as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code, and shall be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(q) “**Effective Date**” means April 25, 2006, the first date that the Company’s stockholders approved the Plan at the 2006 Annual Meeting of Stockholders.

(r) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, shall not cause a Director to be considered an “Employee” for purposes of the Plan.

(s) “**Entity**” means a corporation, partnership or other entity.

(t) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(u) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” shall not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the effective date of the Plan as set forth in Section 12, is the Owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the combined voting power of the Company’s then outstanding securities.

(v) “**Fair Market Value**” means for purposes of Sections 3(f), 5(b), 5(c), 6(b), 6(c), 6(d)(iv), 7(c)(ii), 7(c)(iii) and 8(d), as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any market system, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date in question, as reported in The Wall Street Journal or such other source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price (or closing bid if no sales were reported) for the Common Stock on the date in question, then the Fair Market Value shall be the closing sales price (or closing bid if no sales were reported) on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined by the Board in a manner that complies with Sections 409A and 422 of the Code.

(w) “**Incentive Stock Option**” means an Option which qualifies as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(x) “**Non-Employee Director**” means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from

the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("**Regulation S-K**")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(y) "**Nonstatutory Stock Option**" means an Option which does not qualify as an Incentive Stock Option.

(z) "**Officer**" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(aa) "**Option**" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(bb) "**Option Agreement**" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(cc) "**Optionholder**" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(dd) "**Other Stock Award**" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 7(e).

(ee) "**Other Stock Award Agreement**" means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(ff) "**Outside Director**" means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of Treasury Regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" who receives compensation for prior services (other than benefits under a tax-qualified retirement plan) during the taxable year, has not been an officer of the Company or an "affiliated corporation," and does not receive remuneration from the Company or an "affiliated corporation," either directly or indirectly, in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

(gg) "**Own,**" "**Owned,**" "**Owner,**" "**Ownership**" A person or Entity shall be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(hh) "**Participant**" means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(ii) "**Performance Cash Award**" means an award of cash granted pursuant to the terms and conditions of Section 7(d)(ii).

(jj) "**Performance Criteria**" means one or more criteria that the Board shall select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that shall be used to establish such Performance Goals may be based on any one of, or combination of, the following: (i) earnings per share; (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization (EBITDA); (iv) net earnings; (v) return on equity; (vi) return on assets, investment, or capital employed; (vii) operating margin; (viii) gross margin; (ix) operating income; (x) net income (before or after taxes); (xi) net operating income; (xii) net operating income after tax; (xiii) pre- and after-tax income; (xiv) pre-tax profit; (xv) operating cash flow; (xvi) orders (including backlog) and revenue; (xvii) orders quality metrics (to the extent consistent with

Section 162(m) of the Code, if deductibility is desired); (xviii) increases in revenue or product revenue; (xix) expenses and cost reduction goals; (xx) improvement in or attainment of expense levels; (xxi) improvement in or attainment of working capital levels; (xxii) market share; (xxiii) cash flow; (xxiv) cash flow per share; (xxv) share price performance; (xxvi) debt reduction; (xxvii) implementation or completion of projects or processes (to the extent consistent with Section 162(m) of the Code, if deductibility is desired); (xxviii) customer satisfaction (to the extent consistent with Section 162(m) of the Code, if deductibility is desired); (xxix) stockholders' equity; (xxx) quality measures (to the extent consistent with Section 162(m) of the Code, if deductibility is desired); (xxxi) "Non-GAAP Net Income" (meaning net income excluding (1) the amortization of acquired intangible assets; (2) the impact of stock-based compensation expense; (3) acquisition-related costs; (4) other non-recurring significant items, such as the effect of tax or legal settlements with the Internal Revenue Service and restructuring charges; and (5) the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes); and (xxxii) to the extent that an Award is not intended to comply with Section 162(m) of the Code, any other measures of performance selected by the Board. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award. The Board shall, in its sole discretion, define the manner of calculating the Performance Criteria it selects to use for such Performance Period.

(kk) "**Performance Goals**" means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be set on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to internally generated business plans, approved by the Board, the performance of one or more comparable companies or the performance of one or more relevant indices. To the extent consistent with Section 162(m) of the Code and the regulations thereunder, the Board is authorized to make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (i) to exclude restructuring and/or other nonrecurring charges (including but not limited to the effect of tax or legal settlements); (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude stock-based compensation expense determined under generally accepted accounting principles; (vi) to exclude any other unusual or infrequently occurring item; (vii) to respond to, or in anticipation of, any unusual or extraordinary corporate item, transaction, event or development; (viii) to respond to, or in anticipation of, changes in applicable laws, regulations, accounting principles, or business conditions; (ix) to exclude the dilutive effects of acquisitions or joint ventures; (x) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (xi) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common shareholders other than regular cash dividends; (xii) to reflect a corporate transaction, such as a merger, consolidation, separation (including a spinoff or other distribution of stock or property by a corporation), or reorganization (whether or not such reorganization comes within the definition of such term in Section 368 of the Code); (xiii) to reflect any partial or complete corporate liquidation; (xiv) to exclude the effect of in-process research and development expenses; and (xv) to exclude the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes. The Board also retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals (to the extent consistent with Section 162(m) of the Code, if deductibility is desired).

(ll) "**Performance Period**" means the one or more periods of time, which may be of varying and overlapping durations, as the Committee may select, over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Performance Stock Award or a Performance Cash Award.

(mm) "**Performance Stock Award**" means either a Restricted Stock Award or a Restricted Stock Unit Award granted pursuant to the terms and conditions of Section 7(d)(i).

(nn) "**Plan**" means this Synopsys, Inc. 2006 Employee Equity Incentive Plan.

(oo) "**Prior Plans**" means the Company's 1992 Stock Option Plan, 1998 Nonstatutory Stock Option Plan, and 2005 Assumed Stock Option Plan as in effect immediately prior to the Effective Date.

(pp) "**Restricted Stock Award**" means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 7(a).

(qq) "**Restricted Stock Award Agreement**" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(rr) "**Restricted Stock Unit Award**" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 7(b).

(ss) "**Restricted Stock Unit Award Agreement**" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement shall be subject to the terms and conditions of the Plan.

(tt) "**Rule 16b-3**" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(uu) "**Securities Act**" means the Securities Act of 1933, as amended.

(vv) "**Stock Appreciation Right**" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 7(c).

(ww) "**Stock Appreciation Right Agreement**" means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement shall be subject to the terms and conditions of the Plan.

(xx) "**Stock Award**" means any right granted under the Plan, including an Option, a Stock Appreciation Right, a Restricted Stock Award, a Restricted Stock Unit Award, a Performance Stock Award, or an Other Stock Award.

(yy) "**Stock Award Agreement**" means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement shall be subject to the terms and conditions of the Plan.

(zz) "**Subsidiary**" means, with respect to the Company, (i) any corporation of which more than fifty percent (50%) of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than fifty percent (50%).

(aaa) "**Ten Percent Stockholder**" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Affiliate.

### 3. ADMINISTRATION.

(a) **Administration by Board.** The Board shall administer the Plan unless and until the Board delegates administration of the Plan to a Committee, as provided in Section 3(c).

(b) **Powers of Board.** The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board,

in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(ii) To determine from time to time (1) which of the persons eligible under the Plan shall be granted Awards; (2) when and how each Award shall be granted; (3) what type or combination of types of Award shall be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person shall be permitted to receive cash or Common Stock pursuant to an Award; and (5) the number of shares of Common Stock with respect to which a Stock Award shall be granted to each such person.

(iii) To accelerate the time at which an Award may be exercised or the time during which an Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Award stating the time at which it may be exercised or the time during which it will vest.

(iv) To approve forms of award agreements for use under the Plan and to amend the terms of any one or more outstanding Awards.

(v) To amend the Plan or an Award as provided in Section 10. Subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent if necessary to maintain the qualified status of the Award as an Incentive Stock Option, to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code or to comply with other applicable laws.

(vi) To terminate or suspend the Plan as provided in Section 11.

(vii) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan.

(viii) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by individuals who are foreign nationals or employed outside the United States.

**(c) Delegation To Committee.**

(i) **General.** The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board or the Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, re-vest in the Board some or all of the powers previously delegated.

(ii) **Section 162(m) and Rule 16b-3 Compliance.** In the sole discretion of the Board, the Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code, and/or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. In addition, the Board or the Committee, in its sole discretion, may (1) delegate to a committee of one or more members of the Board who need not be Outside Directors the authority to grant Awards to eligible persons who are either (a) not then Covered Employees and are not expected to be Covered Employees at the time of recognition of income resulting from such Award, or (b) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code, and/or (2) delegate to a committee of one or more members of the Board who need not be Non-Employee Directors the authority to grant Stock Awards to eligible persons who are not then subject to Section 16 of the Exchange Act.

(d) **Delegation to an Officer.** The Board may delegate to one or more Officers of the Company the authority to do one or both of the following (i) designate Employees of the Company or any of its Subsidiaries to be recipients of Options, Stock Appreciation Rights and, to the extent permitted by applicable law, other Stock Awards and, to the extent permitted by applicable law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however*, that the Board resolutions regarding such delegation shall specify the total number of shares of Common Stock that may be subject to the Options granted by such Officer. Any such Stock Awards granted by Officers will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary in this Section 3(d), the Board may not delegate to an Officer authority to determine the Fair Market Value of the Common Stock pursuant to Section 2(v)(ii) above.

(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

(f) **Repricing; Cancellation and Re-Grant of Stock Awards.** Neither the Board nor any Committee shall have the authority to: (i) reprice any outstanding Stock Awards under the Plan, (ii) provide for the exchange of an Option or Stock Appreciation Right for cash when the exercise price or strike price of such Option or Stock Appreciation Right, respectively, is greater than or equal to the Fair Market Value of a share of Common Stock or (iii) cancel and re-grant any outstanding Stock Awards under the Plan in a manner that would constitute a repricing of such Stock Awards under applicable accounting rules, in each case unless the stockholders of the Company have approved such an action within twelve (12) months prior to such an event; *provided, however*, that this provision shall not prevent cancellations of Stock Awards upon expiration or termination of such Stock Awards and the return of the underlying shares of Common Stock to the Plan for future issuance pursuant to Section 4(b) hereof.

#### **4. SHARES SUBJECT TO THE PLAN.**

(a) **Share Reserve.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, the number of shares of Common Stock that may be issued pursuant to Stock Awards granted under this Plan shall not exceed Eighty-Eight Million Five Hundred Ninety-Seven Thousand Two Hundred Forty-Eight (88,597,248) shares of Common Stock in the aggregate. Subject to Section 4(b), the number of shares available for issuance under the Plan shall be reduced by: (i) one (1) share for each share of stock issued pursuant to (A) an Option granted under Section 6, or (B) a Stock Appreciation Right granted under Section 7(c), and (ii) (A) one and thirty-six hundredths (1.36) shares for each share of Common Stock issued prior to February 27, 2009 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (B) two and eighteen hundredths (2.18) shares for each share of Common Stock issued on or after February 27, 2009 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (C) one and twenty-five hundredths (1.25) shares for each share of Common Stock issued on or after March 24, 2011 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (D) one and five tenths (1.50) shares for each share of Common Stock issued on or after April 3, 2012 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (E) one and six tenths (1.60) shares for each share of Common Stock issued on or after April 2, 2015 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, and (F) one and seven tenths (1.70) shares for each share of Common Stock issued on or after March 29, 2016 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7. Shares may be issued in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, or other applicable rule, and such issuance shall not reduce the number of shares available for issuance under the Plan.

(b) **Reversion of Shares to the Share Reserve.**

(i) **Shares Available For Subsequent Issuance.** If any (i) Stock Award shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full,

(ii) shares of Common Stock issued to a Participant pursuant to a Stock Award are forfeited to or repurchased by the Company at their original exercise or purchase price (if any) pursuant to the Company's reacquisition or repurchase rights under the Plan, including any forfeiture or repurchase caused by the failure to meet a contingency or condition required for the vesting of such shares, or (iii) Stock Award is settled in cash, then the shares of Common Stock not issued under such Stock Award, or forfeited to or repurchased by the Company, shall revert to and again become available for issuance under the Plan. To the extent there is issued a share of Common Stock pursuant to a Stock Award that counted as either (A) one and thirty-six hundredths (1.36) shares, (B) two and eighteen hundredths (2.18) shares, (C) one and twenty-five hundredths (1.25) shares, (D) one and five tenths (1.50) shares, (E) one and six tenths (1.60) shares, or (F) one and seven tenths (1.70) shares, as applicable, against the number of shares available for issuance under the Plan pursuant to Section 4(a) and such share of Common Stock again becomes available for issuance under the Plan pursuant to this Section 4(b)(i) on or after March 29, 2016, then the number of shares of Common Stock available for issuance under the Plan shall increase by one and seven tenths (1.70) shares (regardless of when such share was issued).

(ii) **Shares Not Available for Subsequent Issuance.** If any shares subject to a Stock Award are not delivered to a Participant because the Stock Award is exercised through a reduction of shares subject to the Stock Award (*i.e.*, "net exercised") or an appreciation distribution in respect of a Stock Appreciation Right is paid in shares of Common Stock, the number of shares subject to the Stock Award that are not delivered to the Participant shall be deemed issued and then immediately reacquired by the Company, and therefore shall **not** remain available for subsequent issuance under the Plan. If any shares subject to a Stock Award are not delivered to a Participant because such shares are withheld in satisfaction of the withholding of taxes incurred in connection with the exercise of, or the issuance of shares under, a Stock Award, the number of shares that are not delivered to the Participant shall be deemed issued and then immediately reacquired by the Company, and therefore shall **not** remain available for subsequent issuance under the Plan. If the exercise price of any Stock Award is satisfied by tendering shares of Common Stock held by the Participant (either by actual delivery or attestation), then the number of shares so tendered shall **not** become available for subsequent issuance under the Plan.

(c) **Incentive Stock Option Limit.** Notwithstanding anything to the contrary in this Section 4, subject to the provisions of Section 9(a) relating to Capitalization Adjustments the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options shall be Eighty-Eight Million Five Hundred Ninety-Seven Thousand Two Hundred Forty-Eight (88,597,248) shares of Common Stock.

(d) **Source of Shares.** The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

## 5. ELIGIBILITY.

(a) **Eligibility for Specific Stock Awards.** Incentive Stock Options may be granted only to Employees. Stock Awards other than Incentive Stock Options may be granted to Employees and Consultants; *provided, however*, that Nonstatutory Stock Options and Stock Appreciation Rights may not be granted to Employees and Consultants who are providing Continuous Services only to any "parent" of the Company, as such term is defined in Rule 405 promulgated under the Securities Act, unless such Stock Awards comply with (or are exempt from) Section 409A of the Code or unless the stock underlying such Stock Awards is otherwise determined to be "service recipient stock" under Section 409A of the Code. Stock Awards under this Plan may not be granted to non-employee Directors.

(b) **Ten Percent Stockholders.** An Employee who is also a Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred

ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant and the Option has a term of no more than five (5) years from the date of grant and is not exercisable after the expiration of five (5) years from the date of grant.

(c) **Section 162(m) Limitation on Annual Awards.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, no Employee shall be eligible to be granted Stock Awards whose value is determined by reference to an increase over an exercise or strike price of at least one hundred percent (100%) of the Fair Market Value of the Common Stock on the date the Stock Award is granted covering more than one million (1,000,000) shares of Common Stock during any calendar year. For limitations on the annual award size of Performance Stock Awards and Performance Cash Awards, see Section 7(d) below.

## 6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for shares of Common Stock purchased on exercise of each type of Option. The provisions of separate Options need not be identical; *provided, however*, that each Option Agreement shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) **Term.** No Option shall be exercisable after the expiration of seven (7) years from the date of grant, or such shorter period specified in the Option Agreement; *provided, however*, that an Incentive Stock Option granted to a Ten Percent Stockholder shall be subject to the provisions of Section 5(b).

(b) **Exercise Price of an Incentive Stock Option.** Subject to the provisions of Section 5(b) regarding Ten Percent Stockholders, the exercise price of each Incentive Stock Option shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, an Incentive Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner consistent with the provisions of Sections 409A and 424(a) of the Code.

(c) **Exercise Price of a Nonstatutory Stock Option.** The exercise price of each Nonstatutory Stock Option shall be not less than one hundred percent (100%) of the Fair Market Value of the Common Stock subject to the Option on the date the Option is granted. Notwithstanding the foregoing, a Nonstatutory Stock Option may be granted with an exercise price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner consistent with the provisions of Sections 409A and 424(a) of the Code.

(d) **Consideration.** The purchase price of Common Stock acquired pursuant to the exercise of an Option shall be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board shall have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The methods of payment permitted by this Section 6(d) are:

(i) by cash, check or electronic transfer of cash or cash equivalents;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) by a "net exercise" arrangement, if the option is a Nonstatutory Stock Option, pursuant to which the Company will reduce the number of shares of Common Stock issued

upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, the Company shall accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued; *provided, however*, that shares of Common Stock will no longer be outstanding under an Option and will not be exercisable thereafter to the extent that (x) shares are used to pay the exercise price pursuant to the “net exercise,” (y) shares are delivered to the Participant as a result of such exercise, and (z) shares are withheld to satisfy tax withholding obligations; or

(v) in any other form of legal consideration that may be acceptable to the Board.

(e) **Transferability of Options.** The Board may, in its sole discretion, impose such limitations on the transferability of Options as the Board shall determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options shall apply:

(i) **Restrictions on Transfer.** An Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder.

(ii) **Domestic Relations Orders.** Notwithstanding the foregoing, an Option may be transferred pursuant to a domestic relations order; *provided, however*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) **Beneficiary Designation.** Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form provided by or otherwise satisfactory to the Company and any broker designated by the Company to effect Option exercises, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option. In the absence of such a designation, the executor or administrator of the Optionholder’s estate shall be entitled to exercise the Option. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) **Vesting of Options Generally.** The total number of shares of Common Stock subject to an Option may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on performance or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options may vary. The provisions of this Section 6(f) are subject to any Option provisions governing the minimum number of shares of Common Stock as to which an Option may be exercised.

(g) **Termination of Continuous Service.** In the event that an Optionholder’s Continuous Service terminates (other than for Cause or upon the Optionholder’s death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination of Continuous Service) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Optionholder’s Continuous Service (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Optionholder does not exercise his or her Option within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(h) **Extension of Termination Date.** An Optionholder’s Option Agreement may provide that if the exercise of the Option following the termination of the Optionholder’s Continuous Service (other than upon the Optionholder’s death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of a period of three (3) months after the termination of the Optionholder’s Continuous Service (or such longer or shorter period specified in the Option Agreement) during which the exercise of the Option would not be in violation of such registration requirements, or (ii) the expiration of the term of the Option as set forth in the Option Agreement.

(i) **Disability of Optionholder.** In the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination of Continuous Service (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination of Continuous Service, the Optionholder does not exercise his or her Option within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(j) **Death of Optionholder.** In the event that (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death, or (ii) the Optionholder dies within the period (if any) specified in the Option Agreement after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the option upon the Optionholder's death, but only within the period ending on the earlier of (i) the date twelve (12) months following the date of death (or such longer or shorter period specified in the Option Agreement), or (ii) the expiration of the term of such Option as set forth in the Option Agreement. If, after the Optionholder's death, the Option is not exercised within the time specified herein or in the Option Agreement (as applicable), the Option shall terminate.

(k) **Termination for Cause.** In the event that an Optionholder's Continuous Service is terminated for Cause, the Option shall terminate immediately and cease to remain outstanding and the Option shall cease to be exercisable with respect to any shares of Common Stock (whether vested or unvested) at the time of such termination.

## 7. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

(a) **Restricted Stock Awards.** Each Restricted Stock Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (ii) evidenced by a certificate, which certificate shall be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical; *provided, however*, that each Restricted Stock Award Agreement shall include (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Consideration.** A Restricted Stock Award may be awarded in consideration for (i) past or future services rendered to the Company or an Affiliate, or (ii) any other form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) **Vesting.** Shares of Common Stock awarded under a Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) **Termination of Participant's Continuous Service.** In the event a Participant's Continuous Service terminates, the Company may receive via a forfeiture condition or repurchase right any or all of the shares of Common Stock held by the Participant which have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) **Transferability.** Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board shall determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(b) **Restricted Stock Unit Awards.** Each Restricted Stock Unit Award Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical; *provided, however*, that each Restricted Stock Unit Award Agreement shall include (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Consideration.** A Restricted Stock Unit Award may be awarded in consideration for (i) past or future services rendered to the Company or an Affiliate, or (ii) any other form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) **Vesting.** At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) **Payment.** A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) **Termination of Participant's Continuous Service.** Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(c) **Stock Appreciation Rights.** Each Stock Appreciation Right Agreement shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The terms and conditions of Stock Appreciation Right Agreements may change from time to time, and the terms and conditions of separate Stock Appreciation Right Agreements need not be identical; *provided, however*, that each Stock Appreciation Right Agreement shall include (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) **Term.** No Stock Appreciation Right shall be exercisable after the expiration of seven (7) years from the date of grant, or such shorter period specified in the Stock Appreciation Right Agreement.

(ii) **Strike Price.** Each Stock Appreciation Right will be denominated in shares of Common Stock equivalents. The strike price of each Stock Appreciation Right shall not be less than one hundred percent (100%) of the Fair Market Value of the Common Stock equivalents subject to the Stock Appreciation Right on the date of grant. Notwithstanding the foregoing, a Stock Appreciation Right may be granted with a strike price lower than that set forth in the preceding sentence if such Stock Appreciation Right is granted pursuant to an assumption or substitution for another stock appreciation right in a manner consistent with the provisions of Sections 409A and 424(a) of the Code.

(iii) **Calculation of Appreciation.** The appreciation distribution payable on the exercise of a Stock Appreciation Right will be not greater than an amount equal to the excess of (i) the aggregate Fair Market Value (on the date of the exercise of the Stock Appreciation Right) of a number of shares of Common Stock equal to the number of share of Common Stock equivalents in which the Participant is vested under such Stock Appreciation Right, and with respect to which the Participant is exercising the Stock Appreciation Right on such date, over (ii) the strike price that is determined by the Board on the date of grant of the Stock Appreciation Right.

(iv) **Vesting.** At the time of the grant of a Stock Appreciation Right, the Board may impose such restrictions or conditions to the vesting of such Stock Appreciation Right as it, in its sole discretion, deems appropriate.

(v) **Exercise.** To exercise any outstanding Stock Appreciation Right, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such Stock Appreciation Right.

(vi) **Payment.** The appreciation distribution in respect of a Stock Appreciation Right may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and set forth in the Stock Appreciation Right Agreement evidencing such Stock Appreciation Right.

(vii) **Termination of Continuous Service.** In the event that a Participant's Continuous Service terminates (other than for Cause or upon the Participant's death or Disability), the Participant may exercise his or her Stock Appreciation Right (to the extent that the Participant was entitled to exercise such Stock Appreciation Right as of the date of termination of Continuous Service) but only within such period of time ending on the earlier of (i) the date three (3) months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the Stock Appreciation Right Agreement), or (ii) the expiration of the term of the Stock Appreciation Right as set forth in the Stock Appreciation Right Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Stock Appreciation Right within the time specified herein or in the Stock Appreciation Right Agreement (as applicable), the Stock Appreciation Right shall terminate.

(viii) **Extension of Termination Date.** A Participant's Stock Appreciation Right Agreement may provide that if the exercise of the Stock Appreciation Right following the termination of the Participant's Continuous Service (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Stock Appreciation Right shall terminate on the earlier of (i) the expiration of a period of three (3) months after the termination of the Participant's Continuous Service (or such longer or shorter period specified in the Stock Appreciation Right Agreement) during which the exercise of the Stock Appreciation Right would not be in violation of such registration requirements, or (ii) the expiration of the term of the Stock Appreciation Right as set forth in the Stock Appreciation Right Agreement.

(ix) **Disability of Participant.** In the event that a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Stock Appreciation Right (to the extent that the Participant was entitled to exercise such Stock Appreciation Right as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Appreciation Right Agreement), or (ii) the expiration of the term of the Stock Appreciation Right as set forth in the Stock Appreciation Right Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Stock Appreciation Right within the time specified herein or in the Stock Appreciation Right Agreement (as applicable), the Stock Appreciation Right shall terminate.

(x) **Death of Participant.** In the event that (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Appreciation Right Agreement after the termination of the Participant's Continuous Service for a reason other than death, then the Stock Appreciation Right may be exercised (to the extent the Participant was entitled to exercise such Stock Appreciation Right as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Stock Appreciation Right by bequest or inheritance or by a person designated to exercise the Stock Appreciation Right upon the Participant's death, but only within the period ending on the earlier of (i) the date twelve (12) months following the date of death (or such longer or shorter period specified in the Stock Appreciation Right Agreement), or (ii) the expiration of the term of such Stock Appreciation Right as set forth in the Stock Appreciation

Right Agreement. If, after the Participant's death, the Stock Appreciation Right is not exercised within the time specified herein or in the Stock Appreciation Right Agreement (as applicable), the Stock Appreciation Right shall terminate.

(xi) **Termination for Cause.** In the event that a Participant's Continuous Service is terminated for Cause, the Stock Appreciation Right shall terminate immediately and cease to remain outstanding and the Stock Appreciation Right shall cease to be exercisable with respect to any shares of Common Stock (whether vested or unvested) at the time of such termination.

**(d) Performance Awards.**

(i) **Performance Stock Awards.** A Performance Stock Award is either a Restricted Stock Award or Restricted Stock Unit Award that may be granted, may vest, or may be exercised based upon the attainment during a Performance Period of one or more Performance Goals. A Performance Stock Award may, but need not, require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Committee in its sole discretion. The maximum benefit to be granted to any Participant in any calendar year attributable to Performance Stock Awards described in this Section 7(d)(i) shall not exceed one million (1,000,000) shares of Common Stock.

(ii) **Performance Cash Awards.** A Performance Cash Award is a cash award that may be granted or paid upon the attainment during a Performance Period of one or more Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained shall be conclusively determined by the Committee in its sole discretion. The maximum benefit to be granted to any Participant in any calendar year attributable to Performance Cash Awards described in this Section 7(d)(ii) shall not exceed four million dollars (\$4,000,000).

(e) **Other Stock Awards.** Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock may be granted either alone or in addition to Stock Awards provided for under Section 6 and the preceding provisions of this Section 7. Subject to the provisions of the Plan, the Board shall have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards. No Other Stock Award may have a term in excess of seven (7) years from the date of grant.

**8. MISCELLANEOUS.**

(a) **Use of Proceeds.** Proceeds from the sale of shares of Common Stock pursuant to Stock Awards shall constitute general funds of the Company.

(b) **Stockholder Rights.** No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until such Participant has satisfied all requirements for exercise of, or the issuance of shares under, the Stock Award pursuant to its terms and the issuance of the Common Stock has been entered into the books and records of the Company.

(c) **No Employment or Other Service Rights.** Nothing in the Plan, any Stock Award Agreement or other instrument executed thereunder or in connection with any Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an

Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(d) **Incentive Stock Option \$100,000 Limitation.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds one hundred thousand dollars (\$100,000), the Options or portions thereof that exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(e) **Investment Assurances.** The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (i) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (ii) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(f) **Securities Law Compliance.** The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however*, that this undertaking shall not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant shall not be eligible for the grant of a Stock Award or the subsequent issuance of Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities laws.

(g) **Withholding Obligations.** Unless prohibited by the terms of a Stock Award Agreement or the written terms of a Performance Cash Award, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with a Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the amount of tax required to be withheld by law (or such other amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award agreement.

(h) **Electronic Delivery.** Any reference herein to a "written" agreement or document shall include any agreement or document delivered electronically, filed publicly at [www.sec.gov](http://www.sec.gov) (or any successor website thereto) or posted on the Company's intranet.

(i) **Deferrals.** To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code, to the extent that Section 409A of the Code applies to such Participant. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Awards and determine when, and in what percentages, Participants may receive payments, including lump-sum payments, following the Participant's separation from service or other permitted distribution event, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(j) **Compliance with Section 409A.** Unless otherwise expressly provided for in a Stock Award Agreement or the written terms of a Performance Cash Award, the Plan and Award agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the agreement evidencing such Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into such Award agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award agreement specifically provides otherwise), if the shares of the Company's Common Stock are publicly traded and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six (6) months following the date of such Participant's "separation from service" or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six (6) month period elapses, with the balance paid thereafter on the original schedule. Each installment of an Award that vests under the Plan is intended to be a "separate payment" for purposes of Treasury Regulations Section 1.409A-2(b)(2), unless otherwise expressly set forth in the written Award agreement.

(k) **Non-Exempt Employees.** No Stock Award granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, shall be first exercisable for any shares of Common Stock until at least six (6) months following the date of grant. Notwithstanding the foregoing, consistent with the provisions of the Worker Economic Opportunity Act, (i) in the event of the Participant's death or Disability, (ii) upon a Corporate Transaction in which such Stock Award is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Stock Award agreement or in another applicable agreement or in accordance with the Company's then current employment policies and guidelines), any vested Stock Awards may be exercised earlier than six (6) months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of a Stock Award will be exempt from his or her regular rate of pay.

(l) **No Obligation to Notify or Minimize Taxes.** The Company shall have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company shall have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

(m) **Corporate Action Constituting Grant of Stock Awards.** Corporate action constituting a grant by the Company of a Stock Award to any Participant shall be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the

instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement or the written terms of a Performance Cash Award as a result of a clerical error in the papering of the Award agreement, the corporate records will control.

## **9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.**

(a) **Capitalization Adjustments.** If any change is made in, or other events occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award during the term of the Plan without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company (each a “**Capitalization Adjustment**”)), the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 4(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 4(c), (iii) the class(es) and maximum number of securities that may be awarded to any person pursuant to Sections 5(c) and 7(d)(i), and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. The conversion of any convertible securities of the Company shall not be treated as a transaction “without receipt of consideration” by the Company.

(b) **Dissolution or Liquidation.** In the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company’s right of repurchase) shall terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company’s repurchase option or subject to the forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) **Corporate Transaction.** The following provisions shall apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in a written agreement between the Company or any Affiliate and the holder of the Stock Award or unless otherwise expressly provided by the Board or Committee at the time of grant of a Stock Award:

(i) **Stock Awards May Be Assumed.** In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation’s parent company) may assume or continue any or all Stock Awards outstanding under the Plan or may substitute similar stock awards for Stock Awards outstanding under the Plan (including, but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Stock Awards may be assigned by the Company to the successor of the Company (or the successor’s parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation may choose to assume or continue only a portion of a Stock Award or substitute a similar stock award for only a portion of a Stock Award. The terms of any assumption, continuation or substitution shall be set by the Board in accordance with the provisions of Section 3(b).

(ii) **Stock Awards Held by Current Participants.** In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue any or all outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous

Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the “**Current Participants**”), the vesting of such Stock Awards (and, if applicable, the time at which such Stock Awards may be exercised) shall (contingent upon the effectiveness of the Corporate Transaction) be accelerated in full to a date prior to the effective time of such Corporate Transaction as the Board shall determine (or, if the Board shall not determine such a date, to the date that is five (5) days prior to the effective time of the Corporate Transaction), and such Stock Awards shall terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall lapse (contingent upon the effectiveness of the Corporate Transaction). No vested Restricted Stock Unit Award shall terminate pursuant to this Section 9(c)(ii) without being settled by delivery of shares of Common Stock, their cash equivalent, any combination thereof, or in any other form of consideration, as determined by the Board, prior to the effective time of the Corporate Transaction (or such later date in accordance with a deferral election as described in Section 8(i)).

(iii) **Stock Awards Held by Former Participants.** In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue any or all outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, the vesting of such Stock Awards (and, if applicable, the time at which such Stock Award may be exercised) shall not be accelerated and such Stock Awards (other than a Stock Award consisting of vested and outstanding shares of Common Stock not subject to the Company’s right of repurchase) shall terminate if not exercised (if applicable) prior to the effective time of the Corporate Transaction; *provided, however*, that any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall not terminate and may continue to be exercised notwithstanding the Corporate Transaction. No vested Restricted Stock Unit Award shall terminate pursuant to this Section 9(c)(iii) without being settled by delivery of shares of Common Stock, their cash equivalent, any combination thereof, or in any other form of consideration, as determined by the Board, prior to the effective time of the Corporate Transaction (or such later date in accordance with a deferral election as described in Section 8(i)).

(iv) **Payment for Stock Awards in Lieu of Exercise or Settlement.** Notwithstanding the foregoing, in the event a Stock Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Stock Award may not exercise such Stock Award but will receive a payment, in such form as may be determined by the Board, equal in value to the excess, if any, of (i) the value of the cash or property the holder of the Stock Award would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (ii) any exercise price payable by such holder in connection with such exercise. In addition, the Board may provide that with respect to one or more other Stock Awards, such awards will be cancelled prior to exercise or settlement in exchange for a payment, in such form as may be determined by the Board, equal in value to the excess, if any, of (i) the value of the cash or property the holder of the Stock Award would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (ii) any exercise or purchase price (if any) payable by such holder in connection with such Stock Award, and such payment may be fully vested at the time of the Corporate Transaction or may be required to vest after such time substantially in accordance with the schedule originally in effect immediately prior to the Corporate Transaction.

(d) **Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any

Affiliate and the Participant. A Stock Award may vest as to all or any portion of the shares subject to the Stock Award (i) immediately upon the occurrence of a Change in Control, whether or not such Stock Award is assumed, continued, or substituted by a surviving or acquiring entity in the Change in Control, or (ii) in the event a Participant's Continuous Service is terminated, actually or constructively, within a designated period prior to, at, or following the occurrence of a Change in Control. In the absence of a determination by the Plan Administrator, no such acceleration shall occur.

#### **10. AMENDMENT OF THE PLAN AND STOCK AWARDS.**

(a) **Amendment of Plan.** Subject to the limitations of applicable law, the Board at any time, and from time to time, may amend the Plan. However, stockholder approval shall be required for any amendment of the Plan that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to receive Awards under the Plan, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of Awards available for issuance under the Plan, but only to the extent required by applicable law or listing requirements.

(b) **Stockholder Approval.** The Board, in its sole discretion, may submit any other amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 162(m) of the Code and the regulations thereunder regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to Covered Employees. Approval of the Plan terms by the Company's stockholders does not create a requirement that the Board or the Committee administer the Plan in all cases in compliance with Section 162(m) of the Code, as the Board and the Committee retain the discretion to grant awards that are not designed or intended to be "performance based compensation" under Section 162(m) of the Code.

(c) **Contemplated Amendments.** It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible Employees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to Incentive Stock Options and/or to bring the Plan and/or Incentive Stock Options granted under it into compliance therewith.

(d) **Amendment of Awards.** The Board, at any time and from time to time, may amend the terms of any one or more Awards (either directly or by amending the Plan), including, but not limited to, amendments to provide terms more favorable than previously provided in the Stock Award Agreement or the written terms of a Performance Cash Award, subject to any specified limits in the Plan that are not subject to Board discretion; *provided, however*, that the rights under any Award outstanding at the time of such amendment shall not be materially impaired by any such amendment unless (i) the Company requests the consent of the affected Participant, and (ii) such Participant consents in writing.

#### **11. TERMINATION OR SUSPENSION OF THE PLAN.**

(a) **Plan Term.** The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on April 1, 2026. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) **No Impairment of Rights.** Suspension or termination of the Plan shall not impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

#### **12. EFFECTIVE DATE OF PLAN.**

The Plan first became effective on the Effective Date.

#### **13. CHOICE OF LAW.**

The law of the State of Delaware shall govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

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# Appendix B

## SYNOPSYS, INC.

### 2017 NON-EMPLOYEE DIRECTORS EQUITY INCENTIVE PLAN

(Approved by the Board of Directors on February 14, 2017)  
and the stockholders on April 6, 2017)

#### I. PURPOSE OF THE PLAN

This 2017 Non-Employee Directors Equity Incentive Plan (the "Plan") is intended to promote the interests of Synopsys, Inc., a Delaware corporation (the "Corporation"), by providing the non-employee members of the Board of Directors with the opportunity to acquire a proprietary interest, or otherwise increase their proprietary interest, in the Corporation as an incentive for them to remain in the service of the Corporation.

#### II. DEFINITIONS

For purposes of the Plan, the following definitions shall be in effect:

*ANNUAL MEETING*: the first meeting of the Corporation's stockholders held each calendar year at which directors of the Corporation are selected.

*AWARD*: an Option or an award of Restricted Stock or Restricted Stock Units granted pursuant to Section VI.A.

*AWARDHOLDER*: any person who holds an Award.

*BOARD*: the Corporation's Board of Directors.

*CODE*: the Internal Revenue Code of 1986, as amended.

*COMMON STOCK*: shares of the Corporation's common stock.

*CHANGE IN CONTROL*: a change in ownership or control of the Corporation effected through either of the following transactions:

(1) any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders;

(2) there is a change in the composition of the Board over a period of twenty-four (24) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time such election or nomination was approved by the Board; or

(3) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Corporation and its subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Corporation and its Subsidiaries to a corporation, partnership or other entity, more than fifty percent (50%) of the combined voting power of the voting securities of which are owned by stockholders of the Corporation in substantially the same proportions as their ownership of the outstanding voting securities of the Corporation immediately prior to such sale, lease, license or other disposition.

*EFFECTIVE DATE*: the date this Plan is approved by the Board.

*ELIGIBLE DIRECTOR*: a person designated as an Eligible Director pursuant to Section V.A.

*FAIR MARKET VALUE*: the Fair Market Value per share of Common Stock determined in accordance with the following provisions:

(1) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock shall be the closing sales price (or such other exchange-based or market-based transaction price determined by the Board in advance of any date of grant) for such stock as quoted on such exchange (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination as reported in a source the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(2) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined by the Board in good faith and in a manner that complies with Section 409A of the Code.

*OPTION*: a stock option to purchase shares of Common Stock granted pursuant to the Plan.

*OPTIONEE*: any person to whom an Option is granted under the Plan.

*PERMANENT DISABILITY OR PERMANENTLY DISABLED*: the inability of the Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve (12) months or more.

*RESTRICTED STOCK*: shares of Common Stock granted pursuant to the Plan.

*RESTRICTED STOCK UNIT*: a commitment to issue one share of Common Stock for each unit that becomes vested on the applicable vesting date granted pursuant to the Plan.

*SUBSIDIARY*: with respect to the Corporation, (i) any corporation of which more than fifty percent (50%) of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, owned by the Corporation, and (ii) any partnership in which the Corporation has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than fifty percent (50%).

### **III. ADMINISTRATION OF THE PLAN**

Except as otherwise provided herein, the terms and conditions of each Award (including the dates of grant) shall be determined by the express terms and conditions of the Plan. To the extent not inconsistent with the foregoing, the Board shall have the power to determine the actual Award type, size and vesting provisions each year, to construe and interpret the Plan and Awards granted under it, and to establish, amend, and revoke rules and regulations for the administration of the Plan. All such decisions, interpretations and constructions made by the Board shall be final and binding on all parties who have an interest in the Plan. The Board, in the exercise of this power, may (i) correct any defect, omission or inconsistency in the Plan or in any Stock Option Agreement or Restricted Stock Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective, (ii) to amend the Plan or an Award as provided in Section VIII, or (iii) to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Corporation. Notwithstanding the foregoing, the Board shall not have the power to approve a program whereby outstanding Awards are surrendered in exchange for Awards with a lower exercise price, without first obtaining stockholder approval of such program other than changes to outstanding Awards pursuant to Section IV.C.

#### **IV. STOCK SUBJECT TO THE PLAN**

A. Shares of the Corporation's Common Stock shall be available for issuance under the Plan and shall be drawn from either the Corporation's authorized but unissued shares of Common Stock or from reacquired shares of Common Stock, including shares repurchased by the Corporation on the open market. The number of shares of Common Stock reserved for issuance under the Plan as of the Effective Date is 450,000 shares, inclusive of shares previously issued or made subject to awards under the Plan prior to such time.

B. If an Award granted under this Plan fails to vest, or expires or terminates for any reason prior to being exercised or settled in full, then the shares subject to the portion of the Award that fails to vest, or that expires or terminates without being exercised or settled, shall be again available for issuance under the Plan. By contrast, if the exercise or purchase price of an Award, or the taxes due in respect of an Award, are paid by the Awardholder through tendering back to the Company, or having the Company withhold from issuance, shares of Common Stock from the shares otherwise issuable to the Awardholder, then such shares so tendered back or withheld shall be deemed issued and then immediately returned to the Company; as a result, the number of shares of Common Stock available for issuance under the Plan shall be reduced by the gross number of shares for which the Award is exercised or settled, and not by the net number of shares of Common Stock actually received by the Awardholder.

C. Should any change be made to the Common Stock issuable under the Plan by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, then appropriate adjustments shall be made to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the number and/or class of securities for which Awards are to be subsequently made to each non-employee Board member under the Plan, and (iii) the number and/or class of securities and price per share in effect under each Award outstanding under the Plan. The adjustments to the outstanding Awards shall be made by the Board in a manner which shall preclude the enlargement or dilution of rights and benefits under such Awards and shall be final, binding and conclusive.

#### **V. ELIGIBILITY**

A. *Eligible Directors.* The individuals eligible to receive Awards pursuant to the provisions of this Plan on a given grant date shall be limited to members of the Board who are not-then serving as employees of the Corporation. Status as an employee shall be determined in accordance with Section 16 of the Securities Exchange Act of 1934, as amended. Each non-employee Board member eligible to participate in the Plan is hereby designated an Eligible Director. Employee Board members are not eligible to receive Awards under this Plan.

B. *No Other Stock Plan Rights.* Except for the grants to be made pursuant to this Plan under Section VI below, non-employee Board members shall not be eligible to receive any Awards under this Plan or any other stock plan of the Corporation or any parent or subsidiary.

C. *Award Size Limit.*

(1) *Initial Awards.* No one Eligible Director shall receive Initial Awards in any one calendar year with an aggregate value that exceeds \$750,000.

(2) *Annual Awards.* No one Eligible Director shall receive Annual Awards in any one calendar year with an aggregate value that exceeds \$500,000.

(3) *Determining Value.* For purposes of determining award value under this Section V.C and Section VI below, (i) Options shall be valued as determined for accounting purposes on the date of grant under the generally accepted accounting principles employed by the Corporation for purposes of preparing its financial statements and/or public reporting under Item 402 of Regulation S-K (e.g., Black Scholes value of the shares), and (ii) Awards of Restricted Stock or Restricted Stock Units shall be valued by multiplying the number of shares subject to such Award by the Fair Market Value on the date of grant.

## VI. TERMS AND CONDITIONS OF AUTOMATIC AWARDS

A. *Award Amounts and Dates of Grant.* The Board shall determine the form of the Awards and the size of the Awards on or prior to December 31 of each year for Awards to be made in the following calendar year; provided, however, that the form and size of Awards granted in calendar year 2017 will be determined on the date the Board approved the Plan. If no new determination is made by December 31 for the following year, Awards granted in the following year shall be in the form and size approved for the most recent year as to which a determination was timely made. All Options shall be non-statutory stock options.

(1) *Initial Awards.* Each individual who first becomes an Eligible Director after the Effective Date, whether through election by the Corporation's stockholders or appointment by the Board (but not by virtue of an employee Board member ceasing to be an employee of the Corporation), shall automatically be granted, on the date of such initial election or appointment, an Award or Awards (the "Initial Award") with a value equal to the Initial Award Value.

(2) *Annual Awards.* On the date of each Annual Meeting during the term of this Plan, each Eligible Director who is elected (whether for the first time or through re-election) to the Board at that Annual Meeting shall automatically be granted, on the date of such Annual Meeting (the "Award Annual Meeting"), an annual Award or Awards (an "Annual Award") with a value equal to the Annual Award Value; provided, however, that the date of grant for Annual Awards granted at the Annual Meeting held in calendar 2017 will be the date of such Annual Meeting or the first day thereafter on which a registration statement on Form S-8 has become effective. There shall be no limit on the number of Annual Awards any one Eligible Director may receive over his or her period of continued Board service during the term of this Plan. For clarity, if an Eligible Director is first elected or appointed to the Board on the date of an Annual Meeting, such Eligible Director shall receive an Annual Award and not an Interim Award.

(3) *Interim Awards.* In the case of an Eligible Director who is appointed to the Board on a date (the "Interim Appointment Date") that is neither (x) the date of an Annual Meeting nor (y) a date that is more than eleven (11) months since the most recent Annual Meeting that preceded the Interim Appointment Date, such Eligible Director shall automatically be granted, on the date of such appointment, an Award or Awards (an "Interim Award") with a value equal to the Interim Award Value. For clarity, an Eligible Director shall not receive an Interim Award if he or she is first appointed to the Board more than eleven (11) months after the most recent Annual Meeting, or if he or she is first appointed or elected to the Board on the date of an Annual Meeting.

(4) *Definitions.* The following definitions shall apply for the purposes of this Section VI:

(i) "Initial Award Value" shall mean a dollar amount approved by the Board for the Initial Award to be granted in connection with an individual becoming an Eligible Director.

(ii) "Annual Award Value" shall mean a dollar amount approved by the Board for the Annual Award to be granted for service as a Director for the period from the Award Annual Meeting until the first Annual Meeting following the Award Annual Meeting.

(iii) "Interim Award Value" shall mean a dollar amount approved by the Board for the Interim Award to be granted in connection with an individual becoming an Eligible Director, which value shall be equal to the product of (i) the Annual Award Value the Eligible Director would have received had the Eligible Director been appointed to the Board at the time of the most recent Annual Meeting that preceded the Interim Appointment Date multiplied by (ii) a fraction the numerator of which is twelve (12) minus the lesser of (x) the number of whole months from the most recent Annual Meeting that preceded the Interim Appointment Date until the Interim Appointment Date with any fraction of a month being rounded up to the next whole month or (y) twelve (12) and the denominator of which is twelve (12).

B. *Terms and Conditions of Options.* Any Options granted pursuant to Section VI.A shall have the following terms and conditions:

(1) *Exercise Price.* The exercise price per share of Common Stock subject to such Option shall be equal to one hundred percent (100%) of the Fair Market Value per share of Common Stock on the grant date.

(2) *Payment.* Upon the exercise of the Option in whole or in part, the exercise price for the portion being exercised shall become immediately due and shall be payable in one of the alternative forms specified below, or in a combination of such alternative forms, to the extent permitted by law and permitted in the form of Stock Option Agreement issued in connection with the Option:

(i) full payment in cash or check made payable to the Corporation's order; or

(ii) full payment in shares of Common Stock valued at Fair Market Value on the Exercise Date (as such term is defined below); or

(iii) full payment through a broker-dealer sale and remittance procedure pursuant to which the non-employee Board member (x) shall provide irrevocable written instructions to a brokerage firm acceptable to the Corporation to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares and (y) shall concurrently provide written directives to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale transaction; or

(iv) a "net exercise" arrangement pursuant to which the Corporation will reduce the number of shares of Common Stock actually delivered upon exercise of the Option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price, and the Corporation shall accept a cash payment from the Eligible Director to the extent of any remaining balance of the aggregate exercise price not satisfied by such holding back of whole shares. For clarity, the Option will be deemed exercised as to the number of shares equal to the sum of the shares actually delivered to the Eligible Director plus the number of shares withheld to pay the exercise price.

For purposes of this Section VI.B(2), the Exercise Date shall be the date on which written notice of the Option exercise is delivered to the Corporation or such other date as determined by the Board from time to time in connection with the administration of the Plan. Except to the extent the sale and remittance procedure specified above is utilized in connection with the exercise of the Option, payment of the exercise price for the purchased shares must accompany the exercise notice.

(3) *Exercisability/Vesting.*

(i) Each Option granted pursuant to this Plan may vest and therefore become exercisable in periodic installments that may or may not be equal, as determined by the Board. An Option may be subject to such other terms and conditions on the time or times when it may or may not be exercised as the Board may deem appropriate. The vesting provisions of individual Options may vary. Once a portion of an Option becomes vested, such portion shall remain exercisable until either such portion is exercised or the Option is terminated in accordance with the provisions of this Plan. In no event, however, shall any additional Option shares vest after the Optionee's cessation of Board service.

(ii) Should the Optionee die or become Permanently Disabled while serving as a Board member, then any Option issued under the Plan held by the Optionee at the time of his or her death or Permanent Disability may subsequently be exercised for any or all of the Option shares in which the Optionee is vested at that time plus an additional number of Option shares equal to the number of Option shares (if any) in which the Optionee would have vested had he or she continued in Board service until the next Annual Meeting.

(4) *Option Term.* Each Option under the Plan shall have a maximum term of seven (7) years measured from the automatic grant date.

(5) *Effect of Termination of Board Service.*

(i) Should the Optionee cease to serve as a Board member for any reason (other than death or Permanent Disability) while holding one or more Options issued under the Plan, then such individual shall have a six (6)-month period following the date of such cessation of Board service in which to exercise each such Option for any or all of the Option shares in which the Optionee is vested at the time of his or her cessation of Board service. Each such Option shall immediately terminate and cease to be outstanding, at the time of such cessation of Board service, with respect to any Option shares in which the Optionee is not otherwise at that time vested.

(ii) Should the Optionee die while serving as a Board member on or before the date that is six (6) months after cessation of Board service, then any Option issued under the Plan held by the Optionee at the time of death may subsequently be exercised, for any or all of the Option shares in which the Optionee is vested at the time of his or her cessation of Board service (less any Option shares subsequently purchased by the Optionee prior to death), by the personal representative of the Optionee's estate or by the person or persons to whom the Option is transferred pursuant to the Optionee's will or in accordance with the laws of descent and distribution. The right to exercise each such Option shall lapse upon the expiration of the twelve (12)-month period measured from the date of the Optionee's death.

(iii) Should the Optionee become Permanently Disabled while serving as a Board member, then the Optionee shall have the right to exercise the Option for any or all of the Option shares in which the Optionee is vested at the time of his or her cessation of Board service at any time prior to the expiration of the twelve (12)-month period measured from the date of the Optionee's Permanent Disability.

(iv) If the exercise of the Option following the termination of the Optionee's service as a Board member (other than upon the Optionee's death or Permanent Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act of 1933, as amended, then the Option shall terminate on the earlier of (i) the expiration of a period of six (6)-months after the termination of the Optionee's service as a Board member during which the exercise of the Option would not be in violation of such registration requirements, or (ii) the expiration of the maximum term of the Option. In addition, if the sale of the Common Stock received upon exercise of an Option following the termination of the Optionee's Service as a Board member would violate the Company's insider trading policy, then the Option shall terminate on the earlier of (i) the expiration of a period equal to the applicable post-termination exercise period described in subsections (i)-(iii) above after the termination of the Optionee's service as a Board member during which the exercise of the Option would not be in violation of the Company's insider trading policy; or (ii) the expiration of the maximum term of the Option.

(v) In no event shall any Option under this Plan remain exercisable after the expiration date of the maximum seven (7) year Option term. Upon the expiration of the applicable post-service exercise period under subparagraphs (i) through (iii) above or (if earlier) upon the expiration of the maximum seven (7)-year Option term, the grant shall terminate and cease to be outstanding for any Option shares in which the Optionee was vested at the time of his or her cessation of Board service but for which such Option was not otherwise exercised.

(6) *Stockholder Rights.* The holder of an Option issued under the Plan shall have none of the rights of a stockholder with respect to any shares subject to such Option until such individual shall have exercised the Option and paid the exercise price for the purchased shares.

(7) *Remaining Terms.* The remaining terms and conditions of each Option issued under the Plan shall be as set forth in a written Option agreement (the "Stock Option Agreement") in a

form adopted from time to time by the Board; provided, however, that the terms of any Stock Option Agreement shall be consistent with the provisions of this Plan.

C. *Terms and Conditions of Restricted Stock or Restricted Stock Units.* Any Restricted Stock or Restricted Stock Units granted pursuant to the provisions of Section VI.A shall have the following terms and conditions:

(1) *Payment.* To the fullest extent permitted by law, the payment for the Award shall be in the form of past services rendered to or future services to be rendered to the Corporation. In the event additional consideration is required to be paid in order that the shares subject to such Award shall be deemed fully paid and nonassessable, the Board shall determine the amount and character of such additional consideration.

(2) *Vesting.*

(i) Restricted Stock issued or Restricted Stock Units granted under the Plan may vest in periodic installments that may or may not be equal, as determined by the Board. The vesting provisions of individual shares of Restricted Stock or Restricted Stock Units may vary.

(ii) Should the Eligible Director die or become Permanently Disabled while serving as a Board member, then any Restricted Stock issued or Restricted Stock Units granted under the Plan held by the Eligible Director at the time of his or her death or Permanent Disability shall be deemed vested for a number of shares equal to the number calculated in the preceding sentence as of the date of death or Permanent Disability plus an additional number of shares equal to the number of shares (if any) in which the Eligible Director would have vested had he or she continued in Board service until the next Annual Meeting.

(3) *Effect of Termination of Board Service.* Should an Eligible Director cease to serve as a Board member while holding unvested Restricted Stock or Restricted Stock Units, the unvested stock or unvested Restricted Stock Units shall immediately be forfeited and revert back to the Corporation. No notice or other action shall be required of the Corporation to effectuate such reversion.

(4) *Remaining Terms.* The remaining terms and conditions of each grant of Restricted Stock or Restricted Stock Units under the Plan shall be as set forth in a written restricted stock agreement (the "Restricted Stock Agreement" or "Restricted Stock Unit Agreement") in a form adopted from time to time by the Board; provided, however, that the terms of any Restricted Stock Agreement or Restricted Stock Unit Agreement shall be consistent with the provisions of this Plan.

## **VII. SPECIAL VESTING ACCELERATION EVENTS**

A. In connection with any Change in Control of the Corporation, each outstanding, unvested Option and Restricted Stock Unit award granted under the Plan and each share of unvested Restricted Stock issued under the Plan shall automatically vest in full immediately prior to the specified effective date for the Change in Control.

B. In the event of any Change in Control, the Board may provide that some or all of the outstanding Awards shall be assumed by the successor corporation or its parent corporation. In the event an Option, award of Restricted Stock Units or award of unvested Restricted Stock outstanding immediately prior to the Change in Control is not assumed by the successor corporation or its parent corporation, the outstanding Award shall terminate and cease to be outstanding immediately following the Change in Control to the extent that such Award is not exercised (in the case of Options) or vested (in the case of Restricted Stock and Restricted Stock Units) as of the effective date of the Change in Control, and, in the case of unvested Restricted Stock, such shares shall immediately be forfeited and revert back to the Corporation.

## **VIII. AMENDMENT AND TERMINATION OF THE PLAN AND AWARDS**

The Board has complete and exclusive power and authority to amend or modify the Plan (or any component thereof) in any or all respects whatsoever; provided, however, that no such amendment or

modification shall adversely affect rights and obligations with respect to Awards at the time outstanding under the Plan, unless the affected Eligible Directors consent to such amendment. In addition, the Board may not, without the approval of the Corporation's stockholders, amend the Plan in such a manner that would violate applicable laws or the listing requirements applicable to the Corporation with respect to any securities exchange or quotation system on which the Corporation lists the Corporation's securities.

The Board may suspend or terminate the Plan at any time. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

#### **IX. EFFECTIVE DATE AND TERM OF PLAN**

A. The Plan became effective on the Effective Date, subject to stockholder approval at the 2017 Annual Meeting of stockholders.

B. The Plan shall terminate upon the earlier of (i) the day immediately prior to the date of the Annual Meeting of stockholders that occurs in 2027 or (ii) the date on which all shares available for issuance under the Plan shall have been issued or canceled pursuant to the exercise of Awards. If the date of termination is determined under clause (i) above, then all Options and issuances of Restricted Stock outstanding on such date shall thereafter continue to have force and effect in accordance with the provisions of the applicable Stock Option Agreements, Restricted Stock Agreements and Restricted Stock Unit Agreements.

#### **X. USE OF PROCEEDS**

Any cash proceeds received by the Corporation from the sale of shares pursuant to Options or share issuances under the Plan shall be used for general corporate purposes.

#### **XI. REGULATORY APPROVALS**

A. The implementation of the Plan, the granting of any Awards and the issuance of Common Stock upon the exercise of an Award shall be subject to the Corporation's compliance in all respects with the requirements of applicable law and the rules of any securities exchange or quotation system on which the Corporation lists the Corporation's securities.

B. No shares of Common Stock or other assets shall be issued or delivered under this Plan unless and until there shall have been compliance with all applicable requirements of Federal and state securities laws, including the filing and effectiveness of the Form S-8 registration statement for the shares of Common Stock issuable under the Plan, and all applicable listing requirements of any securities exchange or quotation system on which the Common Stock is then listed or quoted for trading.

#### **XII. NO IMPAIRMENT OF RIGHTS**

Neither the action of the Corporation in establishing the Plan nor any provision of the Plan shall be construed or interpreted so as to affect adversely or otherwise impair the right of the Corporation or the stockholders to remove any individual from the Board at any time in accordance with the provisions of applicable law.

#### **XIII. MISCELLANEOUS PROVISIONS**

A. Awards may not be assigned, encumbered or otherwise transferred by any holder of the Award except by will or the laws of descent and distribution or as provided in the associated Stock Option Agreement, Restricted Stock Agreement or Restricted Stock Unit Agreement.

B. The provisions of the Plan shall inure to the benefit of, and be binding upon, the Corporation and its successors or assigns, and the Awardholder, the legal representatives of their respective estates, their respective heirs or legatees and their permitted assignees.

C. The existence of outstanding Awards shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

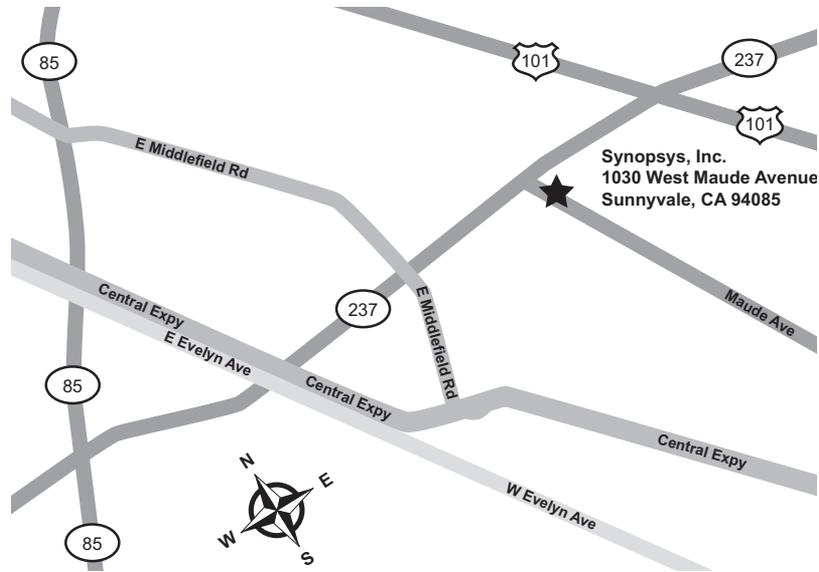
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# Directions to the Annual Meeting of Stockholders of Synopsys, Inc.

**Synopsys, Inc.  
1030 West Maude Avenue  
Sunnyvale, California 94085**



## From San Jose

### Via Highway 101

- Highway 101 North
- Take the Highway 237/Mountain View exit
- Take the Maude Avenue/Middlefield Road exit
- Turn left at first light onto Maude Avenue
- 1030 West Maude Ave. will be the third building on your right

### Via Highway 280

- Highway 280 North
- Take the Highway 85 North exit
- Take the Highway 237 East/Highway 101 exit
- Take the Middlefield Road/Maude Avenue exit
- Turn right at second light onto Maude Avenue
- 1030 West Maude Ave. will be the third building on your right

## From San Francisco

### Via Highway 101

- Highway 101 South
- Take the Ellis Street exit
- Turn right onto Ellis Street
- Turn left onto Middlefield Road
- Turn left at the fourth light onto the frontage road
- Turn right at the first light onto Maude Avenue
- 1030 West Maude Ave. will be the third building on your right

### Via Highway 280

- Highway 280 South
- Take the Highway 85 North exit
- Take the Highway 237 East/Highway 101 exit
- Take the Middlefield Road/Maude Avenue exit
- Turn right at the second light onto Maude Avenue
- 1030 West Maude Ave. will be the third building on your right