SYNOPSYS INC
Form DEF 14A
February 16, 2018
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

(Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement
Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
Definitive Proxy Statement
Definitive Additional Materials
Soliciting Material Pursuant to §240.14a-12

Synopsys, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

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(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

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(1) Amount Previously Paid:

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(4) Date Filed:

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Notice of 2018 Annual Meeting of Stockholders

April 5, 2018

Dear Stockholder,

You are cordially invited to attend the 2018 Annual Meeting of Stockholders of Synopsys, Inc., a Delaware corporation, which will be held on April 5, 2018, 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 nine 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 3,000,000 shares
3. To approve an amendment to our Employee Stock Purchase Plan primarily to increase the number of shares available for issuance under the plan by 5,000,000 shares
4. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this Proxy Statement
5. To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending November 3, 2018
6. 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 9, 2018 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 in person, 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 16, 2018

Important Notice Regarding the Internet Availability of Proxy Materials

for the Annual Meeting to Be Held on April 5, 2018

The Proxy Statement and our 2017 Annual Report on Form 10-K will be available at

http://materials.proxyvote.com/871607 on or about February 23, 2018

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Proxy Statement for the 2018 Annual Meeting of Stockholders to Be Held April 5, 2018

We are providing these proxy materials to you in connection with Synopsys 2018 Annual Meeting of Stockholders to be held on Thursday, April 5, 2018 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 in person, 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 Wednesday, April 4, 2018.

Annual Meeting Agenda

Proposal	Proxy Statement Page Numbers	Board s Recommendation	Vote Required for Approval	Broker Discretionary Votes Allowed
Proposal 1: Election of Directors	3 19	**FOR all nominees**	The nine 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
Proposal 2: Approval of Our 2006 Employee Equity Incentive Plan, as Amended	20 32	**FOR**	FOR votes must exceed votes AGAINST.	No
Proposal 3: Approval of an Amendment to Our Employee Stock Purchase Plan	33 38	**FOR**	FOR votes must exceed votes AGAINST.	No

Proposal 4: Advisory Vote to Approve Executive Compensation	39	74	**FOR**	FOR votes must exceed votes AGAINST.	No
Proposal 5: Ratification of Selection of Independent Registered Public Accounting Firm	75	76	**FOR**	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 81 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.

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A Note about Our Fiscal Year

Our fiscal year generally ends on the Saturday nearest to October 31. Fiscal 2017 ended on October 28, 2017. Fiscal 2018 will end on November 3, 2018.

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We are asking our stockholders to vote For the election of nine 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 ten current directors whose term expires in 2018, nine directors are standing for re-election. As previously announced, Deborah Coleman has decided not to stand for re-election at the end of her term at the Annual Meeting.

Following Ms. Coleman s decision not to stand for re-election in December 2017, the Board of Directors (also referred to in this Proxy Statement as the Board) voted to reduce the size of the Board to nine members immediately following the expiration of Ms. Coleman s term at the Annual Meeting. Accordingly, only nine 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 nine remaining current directors for nomination by our full Board. Based on that recommendation, our Board has nominated those nine directors for election at the Annual Meeting.

Provided that there is a quorum at the Annual Meeting, the nine 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 9, 2018, 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 experience, qualifications and skills 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. In addition, no nominee has an arrangement or understanding with another person under which he or she was or is to be selected as a director or nominee.

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Aart J. de Geus

Co-Chief Executive Officer and Chairman of the Board

Age: 63

Director since 1986

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 over 31 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

Age: 68

Director since 1998

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 27 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.

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Janice D. Chaffin

Age: 63

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

Age: 62

Director since 2001

Independent

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

Synopsys Board Committees:	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.
Compensation	
Governance	
Public Company Directorships:	
Oracle Corporation	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.

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Mercedes Johnson

Age: 63

Director since 2017

Independent

Synopsys Board Committees:

Audit (*Chair*)*

Public Company Directorships:

Juniper Networks, Inc.

Micron Technology, Inc.

Teradyne, Inc.

Former Public Company Directorships Held in Last Five Years:

Intersil Corporation

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 13 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.

* Deborah Coleman is not standing for re-election and will depart at the end of her term at the Annual Meeting, and Ms. Johnson is succeeding Ms. Coleman as Chair of the Audit Committee effective at the Annual Meeting.

Chrysostomos L. Max Nikias

Age: 65

Director since 2011

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

Independent

Synopsys Board Committees:

Compensation (*Chair*)

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 provides our Board with broad engineering knowledge.

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John Schwarz

Age: 67

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

Age: 65

Director since 2003

Independent

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

Synopsys Board Committees:	Teradyne, Inc., and he has been its Chairman of the board of directors since May 2014. Mr. Vallee served on the board of directors of the Federal Reserve Bank of San Francisco from January 2013 to December 2016, and as Chairman of the board of directors from January 2015 to December 2016.
Audit	
Public Company Directorships:	
Teradyne, Inc.	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 and insight into macroeconomic conditions through his previous board role with the Federal Reserve.
Former Public Company Directorships Held in Last Five Years:	
Avnet, Inc.	

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Steven C. Walske

Age: 65

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.

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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/corporate-governance-values/governance-guidelines.html

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-worldwide-eng

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:

https://www.synopsys.com/company/corporate-governance-values/code-of-ethics.html

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. Mr. Vallee has served as our Lead Independent Director since February 2017. 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;

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Participating in the annual performance evaluation of the co-CEOs;

Encouraging dialogue between the independant 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 2017 with Juniper Networks, Inc; Micron Technology, Inc.; Oracle Corporation; PTC, Inc.; Teradata Corporation; Teradyne, Inc.; and Visier, Inc. 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 2017. 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/corporate-governance-values/board-committees.html

The following table summarizes the composition of our Board committees:

Director	Audit Committee	Compensation Committee	Governance Committee
Aart J. de Geus, *Chairman of the Board*			
Chi-Foon Chan			
Janice D. Chaffin			
Bruce R. Chizen			
Deborah A. Coleman(1)			
Mercedes Johnson(2)	Chair		
Chrysostomos L. Max Nikias		Chair	
John Schwarz			Chair
Roy Vallee, *Lead Independent Director*			
Steven C. Walske			
Total committee meetings held in fiscal 2017	10	7	6

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(1) Ms. Coleman is not standing for re-election and will depart at the end of her term at the Annual Meeting.

(2) Ms. Johnson is succeeding Ms. Coleman as Chair of the Audit Committee effective at the Annual Meeting.

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

Members	Mercedes Johnson(1) (*Chair*), Janice D. Chaffin, Deborah Coleman(2) and Roy Vallee.
Number of fiscal 2017 meetings	Ten
Responsibilities	The Audit Committee acts on behalf of our Board, performing financial oversight responsibilities relating to: The integrity of our financial statements, financial reporting processes and systems of internal accounting and financial controls Our internal audit function The annual independent audit of our financial statements The engagement of our independent registered public accounting firm and evaluation of their performance and independence

	Compliance with legal and regulatory requirements that pertain to our financial statements, internal controls over financial reporting, and disclosure controls
	Evaluation of enterprise risk issues

Independence	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.
Audit Committee financial experts	Our Board has determined that Ms. Johnson, Ms. Coleman and Mr. Vallee each qualify as an audit committee financial expert within the meaning of the regulations of the Securities and Exchange Commission.

(1) Ms. Johnson is succeeding Ms. Coleman as Chair of the Audit Committee effective at the Annual Meeting.

(2) Ms. Coleman is not standing for re-election and will depart at the end of her term at the Annual Meeting.

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Compensation Committee

Members	Chrysostomos L. Max Nikias (*Chair*), Bruce Chizen, and Steven C. Walske
Number of fiscal 2017 meetings	Seven
Responsibilities	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 40.
Independence	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

	John Schwarz (*Chair*), Bruce Chizen, and Steven C. Walske

Members	
Number of fiscal 2017 meetings	Six
Responsibilities	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 nine nominees for election to our Board at the Annual Meeting.
Independence	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 2017.

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 three times during fiscal 2017.

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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:

Committee	Primary Areas of Risk Oversight
Audit	Risks related to financial reporting and controls.
	Supervision of the work performed by our independent registered public accounting firm and our internal audit function.
	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.
	Risks relating to our investments, financing activities, taxes, and world-wide insurance programs.
	Risks related to information technology security and data security.
	Review and approval of related person transactions.
Compensation	Risks related to our cash and equity compensation programs and practices.

For additional information regarding the Compensation Committee s assessment of our compensation-related risk, please see the subsection titled Compensation Risk Assessment in the Compensation Discussion and Analysis section below.

Governance	Risks related to our overall corporate governance, including our governance policies and principles.
	Risks related to the composition and structure of our Board of Directors and its committees, which includes annual evaluation of our Board and Board committees and periodic review of Board member and executive officer succession plans.
	The committee chairperson may investigate concerns applicable to our Board and its committees raised through our confidential ethics reporting system.

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 other members of our Corporate Staff 10,000 shares; and Chief Accounting Officer 2,500 shares.

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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 9, 2018, 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 9, 2018, 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/corporate-governance-values/political-activities-policy.html

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 or have a formal policy requiring attendance. Attendance by phone is permitted. All then-current directors attended the 2017 Annual Meeting of Stockholders.

Director Qualifications

The Governance Committee works with our Board to determine the appropriate experience, qualifications and skills that we seek in Board members in light of our business environment and existing Board composition. When evaluating a particular candidate for Board membership, the Governance Committee and our Board consider many factors, including an understanding of the EDA, semiconductor, electronics, software or technology industries; sufficient experience in business operations, finance, marketing, strategic planning and other relevant disciplines; and professional background such as executive leadership experience and other public company board service. They also

consider diversity in their assessment of potential candidates, including diversity of personal background and professional experience, qualifications and skills.

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All candidates for election or re-election are expected to fully participate in Board activities, including preparation for, attendance at and active participation in meetings of our Board of Directors, not hold positions that would conflict with their responsibilities to us, have a high degree of personal integrity and interpersonal skills, and represent the best interests of all of our stockholders and not just certain constituencies.

The Governance Committee and Board believe that a majority of the members of our Board should qualify as independent directors in accordance with our corporate governance guidelines and the listing standards of the NASDAQ Global Select Market. They also deem it appropriate for certain of our executive officers to serve on the Board to provide an internal perspective on the operations, management and culture of our business. The Governance Committee and Board 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.

Director Tenure

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 appointed three highly-qualified 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. To supplement our newer directors, our longer-tenured directors have extensive knowledge of our operations and have the perspective of overseeing our business activities through economic cycles and across differing 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, the functioning of the committees and each individual member of our Board. A director s qualifications are evaluated each time the director is considered for Board membership. For directors seeking re-election, the Governance Committee also evaluates the director s overall service, including the director s past attendance at Board and committee meetings, as well as participation in and contributions to the 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

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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 was previously elected by our stockholders.

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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 2017 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.

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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. Other than the compensation disclosed below, no director received compensation or other payment in connection with his or her candidacy or service on the Board.

Fiscal 2017 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 2017, 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 $15,000 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 2017, non-employee directors were eligible to receive equity awards under the 2017 Non-Employee Directors Equity Incentive Plan (referred to in this Proxy Statement as the 2017 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 2017, under the 2017 Directors Plan, new non-employee directors were eligible to receive (1) an initial stock option grant with a grant date fair value of $350,000, which vests in equal installments on the date immediately preceding each of the first three annual meetings following the date of grant, 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 restricted stock with a grant date fair market value equal to a pro-rated portion of the annual award of $175,000, which vests on the date immediately preceding the first annual meeting following the date of grant.

Annual Awards. For fiscal 2017, under the 2017 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 2017, which was comprised solely of restricted stock, had a grant date fair market value equal to $175,000. The annual restricted stock award vests on the date immediately preceding the first annual meeting following the date of grant, 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 2017 and, as a result, we issued 2,453 shares of restricted stock to each non-employee director.

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The following table sets forth a summary of the compensation paid to our non-employee directors for services in fiscal 2017.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(2)	Total ($)
Janice D. Chaffin	$ 140,000(3)	$ 174,997	$	$ 314,997
Bruce R. Chizen	125,000	174,997		299,997
Deborah A. Coleman	155,000(4)	174,997		329,997
Mercedes Johnson	175,000(5)	174,997	383,007(7)	733,004
Chrysostomos L. Max Nikias	125,000	174,997		299,997
John Schwarz	125,000	174,997		299,997
Roy Vallee	140,000(6)	174,997		314,997
Steven C. Walske	125,000	174,997		299,997

(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 and 2017 Non-Employee Directors Equity Incentive Plans. The grant date fair value of these awards is calculated using the closing price of our common stock of $71.34 on the grant date multiplied by the 2,453 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 2017 Annual Report on Form 10-K. Such stock awards vest on the date immediately preceding the first annual meeting following the date of grant. At the end of fiscal 2017, our non-employee directors held the following aggregate numbers of unvested restricted stock awards: Ms. Chaffin 5,075 shares; Mr. Chizen 5,075 shares; Ms. Coleman 5,075 shares; Ms. Johnson 2,453 shares; Dr. Nikias 5,075 shares; Mr. Schwarz 5,075 shares; Mr. Vallee 5,075 shares; and Mr. Walske 5,075 shares.

(2) At the end of fiscal 2017, the only non-employee directors who held outstanding option awards were Ms. Chaffin (34,222 shares, which remain subject to vesting), Ms. Johnson (30,838 shares, which remain subject to vesting), and Dr. Nikias (42,147 shares, which are fully vested).

(3) Includes $15,000 retainer paid to Ms. Chaffin for serving as an Audit Committee member in fiscal 2017.

(4) Includes $30,000 retainer paid to Ms. Coleman for serving as the Audit Committee chairperson in fiscal 2017.

(5) Includes (a) $15,000 retainer paid to Ms. Johnson for serving as an Audit Committee member in fiscal 2017, and (b) a pro-rated amount of $35,000 paid to Ms. Johnson for the interim period between February 2017 and our 2017 Annual Meeting of Stockholders held on April 6, 2017.

(6) Includes $15,000 retainer paid to Mr. Vallee for serving as an Audit Committee member in fiscal 2017.

(7) Ms. Johnson was appointed as a member of our Board in February 2017, prior to adoption of the 2017 Directors Plan. Pursuant to the terms of the 2005 Non-Employee Directors Equity Incentive Plan (the 2005 Directors Plan), Ms. Johnson was granted, at the time of appointment, an initial award in the form of a non-statutory option to purchase thirty thousand (30,000) shares of Common Stock. Ms. Johnson was also granted an interim award in the form of a non-statutory option to purchase eight hundred and thirty-eight (838) shares of Common Stock, which is based on a pro-rated amount of the annual award.

Fiscal 2018 Compensation

To better align director compensation with the compensation paid by other companies in our peer group, in December 2017, the Board approved an annual retainer for our Lead Independent Director of $30,000 for fiscal 2018. The retainer will be paid in advance in four equal payments at our regularly scheduled quarterly Board meetings. No other changes were made to director compensation.

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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), to increase the number of shares of common stock available for issuance under the 2006 Employee Plan by 3,000,000 shares, representing approximately 2.01% of our shares of common stock outstanding as of February 9, 2018. 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 December 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 discretionary 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 2017 as well as other relevant information is set forth below.

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We note that the cornerstone of our compensation philosophy is pay for performance, as discussed in the Compensation Discussion and Analysis beginning on page 40. In that regard, approximately half of the value of the target equity grants to our named executive officers in fiscal 2017 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 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 3,000,000 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.

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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 2017:

	Number of Restricted Stock Units Granted(1)	Number of Stock Options Granted(2)
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	30,644(3)	160,899
Chi-Foon Chan Co-Chief Executive Officer and President	30,644(3)	160,899
Trac Pham Chief Financial Officer	12,631(4)	66,609
Joseph W. Logan Sales and Corporate Marketing Officer	16,565(3)	86,973
John F. Runkel, Jr. General Counsel and Corporate Secretary	6,253(3)	32,832
Brian M. Beattie Former Executive Vice President, Business Operations and Chief Administrative Officer		
All executive officers as a group (6 persons)	96,737	508,212
All directors who are not executive officers as a group (8 persons)		
All employees, excluding executive officers, as a group ((11,686) persons as of Oct. 28, 2017)(5)	1,487,787	996,463

(1) The aggregate numbers of restricted stock units granted under the 2006 Employee Plan, since its adoption through January 22, 2018, to Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Logan, Mr. Runkel, Mr. Beattie, 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 623,888, 457,055, 81,430, 213,452, 42,562, 190,431, 1,608,818; none; and 15,982,603. Of those aggregate grant numbers for Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Logan, Mr. Runkel, Mr. Beattie, and all executive officers as a group, 24,859; 24,859; 11,877; 11,049; 4,419; none; and 77,063 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 22, 2018, to Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Logan, Mr. Runkel, Mr. Beattie, 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 2,114,269; 1,633,769; 303,646; 833,237; 188,643; 928,194; 6,001,758; none; and 15,564,949.

(3) These restricted stock units required the achievement of pre-established performance goals prior to any vesting of the awards.

(4) Of the 12,631 restricted stock units granted to Mr. Pham during fiscal 2017, 9,110 units required the achievement of pre-established performance goals prior to any vesting of the awards. The remaining 3,521 units vest annually over four years, subject to Mr. Pham s continued service with us.

(5) Equity grants in fiscal 2017 under the 2006 Employee Plan were made to an aggregate of 2,858 employees, excluding our executive officers.

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Additional Equity Plan Information

The following table provides certain additional information regarding the 2006 Employee Plan and 2017 Directors Plan:

	As of 1/22/18
Total Stock Options Outstanding	6,838,779
Total Restricted Stock Unit Awards Outstanding	3,962,932
Total Common Stock Outstanding	148,944,227
Weighted-Average Exercise Price of Stock Options Outstanding	$50.60
Weighted-Average Remaining Duration of Stock Options Outstanding	4.74 years
Total Shares Available for Grant under the 2006 Employee Plan	11,741,304
Total Shares Available for Grant under the 2017 Directors Plan	430,376

	As of 2/9/18 (the Record Date)
Total Common Stock Outstanding	148,957,915

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 2017.

	Fiscal 2017
Stock Options Granted by Synopsys(1)	1,504,675
Restricted Stock Units Granted by Synopsys(2)	1,584,524
Restricted Stock Awards Granted by Synopsys(3)	19,624
Stock Options Cancelled	145,054
Restricted Stock Units Cancelled(4)	239,968
Restricted Stock Awards Cancelled	2,622
Weighted-Average Common Stock Outstanding	150,457,250
Common Stock Outstanding at Fiscal Year End	150,444,705

(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 2017 Directors Plan, which does not contain a fungible share reserve ratio. Represents the actual number of restricted stock awards granted.

(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 3,000,000 shares in the share reserve and incentive stock option limits; and
- certain clarifying amendments to ease administration, eliminate potential ambiguities in plan interpretation and reflect recent changes in law.

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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 U.S. Federal Income Tax Information below for a discussion of the tax treatment of equity awards.

Purpose

The 2006 Employee Plan is intended to create an incentive for our eligible employees and consultants to exert maximum efforts toward our success and provides such individuals with the opportunity to benefit from increases in the value of our common stock, 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. Our Board of Directors has also 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 22, 2018, Synopsys had 10,782 eligible participants 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 91,597,248 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

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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. 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 22, 2018, 11,741,304 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 3,000,000 shares will be available for future grants under the 2006 Employee Plan. Assuming the stockholders approve this Proposal 2, 91,597,248 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

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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 9, 2018, the closing price of our common stock as reported on the NASDAQ Global Select Market was $84.34 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 while in service, 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.

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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,

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the participant dies while in service, 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 and Compensation Committee may grant performance equity awards and performance cash awards that vest based on the attainment of performance goals during a designated performance period.

Performance Goals. Our Board of Directors and 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. 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 and Non-GAAP 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; 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. Non-GAAP measure means the closest GAAP measure 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 restructuring charges; (5) legal matters; (6) material tax impacts, such as the repatriation of offshore cash; and (7) the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes, based upon a normalized annual projected non-GAAP tax rate.

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

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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 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.

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

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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.

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.

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.

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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 (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 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 (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 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

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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. Generally, we will be entitled (subject to the provisions of Section 162(m) of the Code and the satisfaction of a tax reporting obligation) 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. Historically, compensation that qualifies as performance-based compensation under Section 162(m) of the Code could be excluded from this $1,000,000 limit. The performance-based compensation exclusion has now been repealed, effective for taxable years beginning after December 31, 2017, unless transition relief is available for written binding contracts that were in effect (and not subsequently modified) in place as of November 2, 2017.

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We are asking our stockholders to approve an amendment to our Employee Stock Purchase Plan (referred to in this Proposal 3 as the Purchase Plan) to increase the number of shares available for issuance under the Purchase Plan by 5,000,000, representing approximately 3.36% of our shares of common stock outstanding as of February 9, 2018. We adopted the Purchase Plan so we could offer employees of Synopsys and eligible affiliates the opportunity to purchase Synopsys common stock at a discounted price as an incentive for continued employment and to help align their interests with those of our stockholders. We are proposing an increase in the number of shares available for issuance under the Purchase Plan to help us to continue providing this benefit to new and current employees.

Our Board of Directors approved this amendment in December 2017, subject to stockholder approval. If approved by our stockholders, the amendment to our Purchase Plan will become effective upon stockholder approval.

Approval of the amendment to our Purchase 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 will not be counted as either votes cast For or Against this Proposal 3.

Our Board of Directors Recommends that You Vote FOR the

Approval of an Amendment to Our Employee Stock Purchase Plan

Purpose and Background

The Purchase Plan is designed to provide our eligible employees and those of our designated subsidiaries and affiliates with the opportunity to purchase shares of our common stock on periodic purchase dates through accumulated payroll deductions. The Purchase Plan is designed to allow U.S.-based employees to make such purchases in a manner that receives favorable tax treatment under Section 423 of the Code (referred to in this Proxy Statement as Section 423). Our Board of Directors, or its delegate, may approve offerings under the Purchase Plan that are not intended to qualify for such favorable tax treatment under Section 423, including, without limitation, offerings in which eligible employees who are not subject to U.S. tax laws may participate.

Our management believes that maintaining a competitive employee stock purchase plan is an important element in recruiting, motivating and retaining our employees. The Purchase Plan is designed to more closely align the interests of our employees with those of our stockholders by encouraging employees to invest in our common stock, and to help our employees share in our success through the appreciation in value of such purchased stock. The Purchase Plan together with our equity plans are important employee retention and recruitment vehicles. As of the close of enrollment for our most recent semi-annual purchase period under the Purchase Plan, August 31, 2017, there were 7,454 employees participating in the Purchase Plan, representing approximately 81.0% of our employees who are eligible to participate in the Purchase Plan.

As of January 22, 2018, an aggregate of 7,065,298 shares of common stock remained available for future issuance under the Purchase Plan. Our Board of Directors has, subject to stockholder approval of this Proposal 3, increased the aggregate number of shares of our common stock issuable under the Purchase Plan by 5,000,000 shares. The number of employees eligible to participate in the Purchase Plan has increased by approximately 1,100 people since the last

time our stockholders approved an increase in the number of shares issuable under the plan. Our Board of Directors believes the proposed share increase is in the best interests of Synopsys and its stockholders and will help us continue to provide our employees with the opportunity to acquire an ownership interest in Synopsys through their participation in the Purchase Plan.

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Description of the Employee Stock Purchase Plan, as Amended

The material terms and provisions of the Purchase Plan, as amended, are summarized below. This summary, however, does not purport to be a complete description of the Purchase Plan. The following summary of the Purchase Plan is qualified in its entirety by reference to the complete text of the Purchase 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 3, the Purchase Plan has been amended to provide for:

- an increase in the Purchase Plan s share reserve by 5,000,000 shares, and
- certain clarifying amendments to ease administration, eliminate potential ambiguities in plan interpretation and reflect recent changes in law.

Administration

Our Board of Directors, or its delegate, has the power, subject to the terms of the Purchase Plan, to set the provisions of each offering of purchase rights, and to determine whether employees of any of our subsidiary companies or other affiliates will be eligible to participate in an offering. Our Board of Directors may delegate such authority in accordance with applicable law. References in this Proposal 3 to our Board of Directors refer to the Board or its delegate, as applicable. The Compensation Committee of our Board of Directors has been delegated authority to approve the terms of offerings under the Purchase Plan and to otherwise administer the Purchase Plan. As plan administrator, the Compensation Committee has full authority to adopt rules and procedures for the Purchase Plan and to interpret its provisions. The day-to-day administrative functions of the Purchase Plan have been delegated to our Shareholder Services Department.

Share Reserve

The total number of shares of common stock currently reserved for issuance over the term of the Purchase Plan is 45,700,000. As of January 22, 2018, an aggregate of 38,634,702 shares of common stock have been issued to employees under the Purchase Plan, and 7,065,298 shares of common stock remained available for future issuance. Assuming that this Proposal 3 is approved by the stockholders, the total number of shares of common stock reserved for issuance under the Purchase Plan will be increased to 50,700,000 shares. The shares of common stock issuable under the Purchase Plan may be made available from authorized but unissued shares of common stock or from shares of common stock we reacquire, including shares of common stock repurchased on the open market. If any right to purchase shares of common stock terminates for any reason without having been exercised, the shares of common stock not purchased under such right will again become available for issuance under the Purchase Plan.

In the event any change is made to our outstanding common stock (whether by reason of any stock dividend, stock split, combination of shares, or other change affecting the outstanding common stock as a class without our receipt of consideration), our Board of Directors will make appropriate adjustments to (1) the maximum number and class of securities issuable under the Purchase Plan, (2) the maximum share purchase limitations in effect under any offering, and (3) the number and class of securities and the purchase price per share in effect under each outstanding purchase right. Such adjustments are intended to preclude any dilution or enlargement of rights and benefits under the Purchase

Plan.

Eligibility

Only our employees and employees of our designated affiliates are eligible to participate in the Purchase Plan. Our Board of Directors will determine the particular eligibility requirements for participation in an offering. For offerings that are intended to qualify under Section 423, our Board of Directors is not permitted to exclude employees who generally work more than twenty (20) hours per week or more than five (5) months per calendar year. For offerings that are not intended to qualify under Section 423, our Board of Directors has the ability to determine that it is necessary or desirable

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to exclude certain employees by location from participation in our international offerings in order to reflect or comply with local laws or conditions. As of the close of enrollment for our most recent semi-annual purchase period under the Purchase Plan, August 31, 2017, Synopsys had approximately 9,200 employees who were eligible to participate in the Purchase Plan.

Offerings

Shares of common stock are offered under the Purchase Plan through a series of offerings with a duration determined by our Board of Directors, provided that in no event may an offering have a duration that exceeds 27 months. Each offering consists of one or more purchase periods, with purchase dates determined by our Board of Directors prior to the commencement of that offering. Consistent with historical practice, our current offerings consist of a series of overlapping offering periods, each with a duration of twenty-four (24) months. Offerings begin on the first business day of March and on the first business day of September each year. Accordingly, two separate offerings begin in each calendar year.

Our Board of Directors may provide that if the fair market value per share of our common stock on the first day of a subsequent purchase period within a particular offering is less than or equal to the fair market value per share of our common stock on the start date of that offering, then the offering will terminate immediately and the participants will automatically be enrolled in a new offering that begins on the first day of such purchase period.

When an eligible employee elects to participate in an offering, he or she is electing to exercise a purchase right to acquire shares of common stock on each purchase date within the offering. On the purchase date, all payroll deductions and any other permitted contributions collected from the participant are automatically applied to the purchase of common stock, subject to certain limitations. Consistent with historical practice, current purchase periods are semi-annual and run from the first business day in March to the last business day in August each year and from the first business day in September each year to the last business day in February in the immediately succeeding year. Accordingly, shares of common stock are purchased on the last business day in February and August each year with the payroll deductions and other permitted contributions collected from the participants for the purchase period ending with each such semi-annual purchase date.

Purchase Price

The purchase price of the shares of common stock purchased on behalf of each participant on each purchase date is 85% of the lower of (1) the fair market value per share on the start date of the offering in which the participant is enrolled or (2) the fair market value per share on the applicable purchase date of such offering. The fair market value per share on any particular date under the Purchase Plan is generally the closing price per share on such date reported on the NASDAQ Global Select Market. As of February 9, 2018, the closing price of our common stock as reported on the NASDAQ Global Select Market was $84.34 per share.

Payroll Deductions and Stock Purchases

Each participant authorizes periodic payroll deductions of a percentage of his or her earnings, as defined in the offering, to be applied to the acquisition of shares of common stock on the purchase dates. Accordingly, on each purchase date, the accumulated payroll deductions of each participant are automatically applied to the purchase of whole shares of common stock at the purchase price in effect for the participant for that purchase date. The maximum percentage of earnings that the participant may have deducted and contributed toward the purchase of shares during an offering will be established by our Board of Directors and set forth in the offering document, but in no event may it exceed 15% of the participant s earnings attributable to payroll periods applicable to the offering as established by our

Board of Directors.

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Other Limitations

The Purchase Plan imposes certain limitations upon a participant s rights to acquire shares of common stock for offerings that are intended to qualify under Section 423, including the following:

- Purchase rights granted to a participant may not permit such individual to purchase more than $25,000 worth of shares of common stock (valued at the time each purchase right is granted) for each calendar year in which those purchase rights are outstanding.

- Purchase rights may not be granted to any individual if such individual would, immediately after the grant, own or hold outstanding options or other rights to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of the stock of us or any of our affiliates.

Consistent with our historical practice, the Board has set the following limitations on current offerings:

- The maximum number of shares that may be purchased by any participant on any purchase date is 4,000 shares.

- The maximum payroll deduction that may be applied toward the purchase of shares on any purchase date is the lesser of (1) 10% of a participant s earnings or (2) $7,500 per participant.

- The maximum number of shares of common stock purchasable in total by all participants on any one purchase date is 2,000,000.

Termination of Employment

Generally, purchase rights granted pursuant to any offering under the Purchase Plan terminate immediately upon cessation of employment for any reason, including death, and we will refund all accumulated payroll deductions to the terminated employee or his or her beneficiary, as applicable, without interest (unless otherwise required by applicable law).

Stockholder Rights

No participant has any stockholder rights with respect to the shares of common stock covered by a purchase right under the Purchase Plan until the shares of common stock are actually purchased on the participant s behalf. Other than stock splits and other recapitalizations described above, no adjustment will be made for dividends, distributions or other rights for which the record date is prior to the date of such purchase.

Assignability

Purchase rights are not assignable or transferable by a participant other than by will or by the laws of descent and distribution following the participant s death, and during the participant s lifetime, the purchase rights may be exercised only by the participant.

Change in Ownership

In the event a change in ownership of Synopsys occurs, all outstanding purchase rights will automatically be exercised immediately prior to the effective date of such change in ownership. The purchase price in effect for each participant will be equal to 85% of the lower of (1) the fair market value per share on the start date of the offering in which the participant is enrolled at the time the change in ownership occurs or (2) the fair market value per share immediately prior to the effective date of such change in ownership.

A change in ownership will be deemed to occur in the event of (1) a sale, merger or other reorganization in which Synopsys is not the surviving corporation or (2) a reverse merger in which we are the surviving corporation, but in which more than 50% of our outstanding voting stock is transferred to holders different from those who held our stock immediately prior to such transaction.

Share Proration

Should the total number of shares of common stock to be purchased pursuant to outstanding purchase rights on any particular date exceed either (1) the maximum number of shares of common stock

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purchasable in total by all participants on any one purchase date as in effect under an offering or offerings, or (2) the number of shares of common stock then available for issuance under the Purchase Plan, then our Board of Directors will make a pro rata allocation of the available shares of common stock in as nearly a uniform manner as practicable and equitable. In such an event, the plan administrator will refund the accumulated payroll deductions of each participant, to the extent in excess of the purchase price payable for the shares of common stock prorated to such individual.

Amendment and Termination

Our Board of Directors may amend, alter, suspend, discontinue, or terminate the Purchase Plan at any time, including amendments to outstanding purchase rights. However, our Board of Directors must seek stockholder approval of any plan amendment to the extent necessary to satisfy applicable laws or listing requirements. For example, under currently applicable laws and listing requirements our Board of Directors may not, without stockholder approval, amend our Purchase Plan to (1) increase the number of shares of common stock issuable under the Purchase Plan, (2) alter the purchase price formula so as to reduce the purchase price, (3) materially increase the benefits accruing to participants, or (4) materially modify the requirements for eligibility to participate in the Purchase Plan.

Plan Benefits

Participation in the Purchase Plan is voluntary and each eligible employee makes his or her own decision whether and to what extent to participate in the Purchase Plan. In addition, our Board of Directors has not approved any grants of purchase rights that are conditioned on stockholder approval of the amendment to our Purchase Plan. Accordingly, we cannot currently determine the benefits or number of shares that will be received in the future by individual employees or groups of employees under the Purchase Plan. Our non-employee directors are not eligible to participate in the Purchase Plan.

The table below shows, as to the listed individuals and specified groups, the number of shares of common stock purchased under the Purchase Plan during fiscal 2017.

Name	Number of Shares of Common Stock Purchased(1)
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	386
Chi-Foon Chan Co-Chief Executive Officer and President	386
Trac Pham Chief Financial Officer	386
Joseph W. Logan Sales and Corporate Marketing Officer	
John F. Runkel, Jr. General Counsel and Corporate Secretary	298
Brian M. Beattie Former Executive Vice President, Business Operations and Chief Administrative Officer	386
All executive officers as a group (6 persons)	1,842
All directors who are not executive officers as a group (8 persons)(2)	

All employees, excluding executive officers, as a group (11,686 persons as of Oct. 28, 2017)	1,597,620

(1) The aggregate numbers of shares of common stock purchased under the Purchase Plan, since its adoption through January 22, 2018, by Dr. de Geus, Dr. Chan, Mr. Pham, Mr. Logan, Mr. Runkel, Mr. Beattie, 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 29,208; 29,208; 7,072; none; 1,162; 8,278; 74,928; none; and 38,559,774.

(2) Non-employee directors are not eligible to participate in the Purchase Plan.

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U.S. Federal Tax Consequences

The following is a summary of the principal United States federal income taxation consequences to us and our employees with respect to participation in the component of the Purchase Plan intended to qualify as an employee stock purchase plan within the meaning of Section 423. This summary is not intended to be exhaustive and does not discuss the income tax laws of any foreign jurisdictions where a participant may reside or the taxation consequences with respect to participation in any component of the Purchase Plan not intended to meet the requirements of Section 423.

General. The Purchase Plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423, so that purchase rights exercised under the Purchase Plan may qualify as qualified purchases under Section 423. Under such an arrangement, no taxable income will be recognized by a participant, and no deductions will be allowable to us, upon either the grant or the exercise of the purchase rights. Taxable income will not be recognized until there is a sale or other disposition of the shares of common stock acquired under the Purchase Plan or in the event the participant should die while still owning the purchased shares of common stock.

Disqualifying Disposition. If the participant sells or otherwise disposes of the purchased shares of common stock within two years after the start date of the offering period in which such shares were acquired or within one year after the actual purchase date of those shares, then the participant will recognize ordinary income equal to the amount by which the fair market value of the shares of common stock on the purchase date exceeded the purchase price paid for those shares, and 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 an income tax deduction, for the taxable year in which such disposition occurs, equal in amount to such excess. The participant will also recognize capital gain or loss to the extent the amount realized upon the sale or disposition of the shares of common stock differs from the sum of the aggregate purchase price paid for those shares of common stock and the ordinary income recognized upon their disposition.

Qualifying Disposition. If the participant sells or disposes of the purchased shares of common stock more than two years after the start date of the offering period in which the shares of common stock were acquired and more than one year after the actual purchase date of those shares, then the participant will recognize ordinary income in the year of sale or disposition equal to the lesser of (1) the amount by which the fair market value of the shares of common stock on the sale or disposition date exceeded the purchase price paid for those shares of common stock or (2) fifteen percent (15%) of the fair market value of the shares of common stock on the start date of that offering period. Any additional gain or loss upon the disposition will be taxed as a long-term capital gain or loss. We will not be entitled to an income tax deduction with respect to such disposition.

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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 40 to 59 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 2017 Annual Meeting of Stockholders. At our 2017 Annual Meeting, our stockholders overwhelmingly approved the proposal, with approximately 94% 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. Accordingly, this year we are again 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 over the past few years.

We encourage you to carefully review the Compensation Discussion and Analysis beginning on page 40 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 40 to 59 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 4, vote For this Proposal 4. Abstentions will not be counted as either votes cast For or Against this Proposal 4 and have no effect on the vote for this Proposal 4.

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.

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This Compensation Discussion and Analysis discusses the compensation of our named executive officers (NEOs) for fiscal 2017.

Fiscal 2017 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
Joseph W. Logan	Sales and Corporate Marketing Officer
John F. Runkel, Jr.	General Counsel and Corporate Secretary
Brian M. Beattie	Executive Advisor and Former Executive Vice President, Business Operations and Chief Administrative Officer

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 over 31 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 over 27 years. Over the years, Dr. Chan pioneered many aspects of Synopsys including the initiation of our intellectual property (IP) business, leading our global expansion efforts in Asia, and more recently, overseeing the growth of our software integrity portfolio.

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 2017 Business Performance Overview

We achieved outstanding results in fiscal 2017 across many dimensions company-wide, among our different products and services groups, short- and long-term and from both financial and strategic perspectives. A few of our business highlights include the following:

- 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. Augmenting solid overall growth was another year of record revenue for our hardware verification products.

We further expanded our IP portfolio to help address specific application requirements for the mobile, automotive, digital home, Internet of Things, and cloud computing markets, enabling designers to quickly develop system-on-chips in these areas. Customer adoption drove strong revenue growth.

Our software integrity platform, a comprehensive solution for building security and quality into our customers software development lifecycle and supply chain, demonstrated

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promising growth in fiscal 2017. In addition, we closed an important acquisition in the first fiscal quarter, and announced another critical acquisition late in the year. Our tools, services and programs enable our customers to detect and remediate defects and security vulnerabilities earlier in the product development cycle than ever before.

From a financial performance standpoint:

Our business became even stronger throughout the year, resulting in good revenue growth across all product groups and all geographies.

We reported excellent fiscal results, with double-digit revenue and non-GAAP earnings growth. We saw revenue strength across the board, augmented by upside from hardware and IP, and an approximate $150 million increase in non-cancellable backlog.

We continued to drive long-term shareholder value by balancing our investment priorities while executing $400 million in share repurchases during fiscal 2017. We have completed $1.08 billion in share repurchases over the past three years.

Revenue for fiscal 2017 was $2.725 billion, an increase of 12.5% from $2.423 billion in fiscal 2016.

GAAP net income for fiscal 2017 was $136.6 million, or $0.88 per share, compared to $266.8 million, or $1.73 per share, for fiscal 2016. Fiscal 2017 results included a one-time tax expense impact of $166 million resulting from the repatriation of approximately $825 million of offshore cash, initiated in the fourth quarter of fiscal 2017.

Non-GAAP net income for fiscal 2017 was $529.1 million, or $3.42 per share, compared to non-GAAP net income of $466.8 million, or $3.02 per share, for fiscal 2016.

Fiscal 2017 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 2017, 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 78% 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 achieving profitable revenue growth and 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 that is above our peer companies.

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After reviewing our strong fiscal 2016 performance, and considering peer compensation data and the company s compensation budget, in December 2016, the Compensation Committee adjusted the target total direct compensation that our NEOs could earn in fiscal 2017 as follows:

NEO	Change in Target Compensation from Fiscal 2016 to 2017	Commentary
Aart J. de Geus and Chi-Foon Chan	7.5%	The Compensation Committee increased the salary, cash incentive target percentage, and target dollar value of our co-CEOs annual equity grant to recognize their significant contributions in leading the company and helping us achieve our corporate goals despite recent industry and customer consolidation, and help improve the competitiveness of our co-CEOs total target compensation.
Trac Pham	11.0%	The Compensation Committee increased Mr. Pham s salary and the target dollar value of his annual equity grant to recognize Mr. Pham s continuing development in his role and to better align his compensation with current market benchmarks.
Joseph W. Logan	15.9%	The Compensation Committee increased Mr. Logan s salary and the target dollar value of his annual equity grant to recognize his key contributions in an ongoing competitive sales environment.
John F. Runkel, Jr.	0.0%	Mr. Runkel s total compensation was consistent with the 50th percentile of our peers, and thus, remained relatively flat as compared to the previous year.
Brian M. Beattie	(50.5%)	As part of our CFO succession planning, Mr. Beattie s total compensation decreased as he did not receive an equity grant award during the fiscal year.

We performed well against our fiscal 2017 goals. As further described in the respective sections below:

The Average Achievement of our Fiscal 2017 Corporate Financial Goals was 104.9%, thereby yielding a Corporate Financial Payout Factor of 119.3% under our EIP.

We achieved 120.1% of our Fiscal 2019 Revenue Backlog Goal. Based on our EIP Payment Formula, our EIP funding increased to 150.0% of target levels.

We achieved 110.2% of our Fiscal 2017 Non-GAAP Net Income Performance Goal, and accordingly, our NEOs fiscal 2017 PRSUs were earned and eligible to vest.

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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 twelve 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.

Our Compensation Practices

Pay for Performance. Performance-based pay represents a significant portion of our NEO s target total direct compensation. In the beginning of fiscal 2017, the Compensation Committee set fixed compensation at 10% of target total direct compensation for our co-CEOs and, on average, 22% for our other NEOs as a group.	× **No All-or-Nothing Approach.** 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.
Balanced Mix of Performance Goals. 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.	× **No Excessive Risks.** 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.
Competitive Pay. In setting fiscal 2017 total direct compensation for our NEOs other than the co-CEOs, the Compensation Committee reviewed peer data, with an emphasis on the 25th to the 75th percentile of our peer group. The Committee also takes into consideration other factors such as an NEO s level of experience, contributions, performance, retention value of unvested awards, and our compensation budget.	× **No Above-Market CEO Pay.** The Compensation Committee set fiscal 2017 target direct compensation for each of our co-CEOs below the 25th 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.
Double Trigger Change of Control Benefits. Our NEO change of control agreements are double trigger. NEOs do not receive a payment simply due to a change of control and are not eligible for severance benefits if they continue to be employed in a similar role after the change of control.	× **No Excessive Change of Control Payments.** 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.
Maximum Payout Caps. Our cash incentive awards and performance-based restricted stock units are capped, and the Compensation Committee retains negative discretion to reduce our NEOs cash incentive payments.	× **No Excise Tax Gross Ups.** We do not provide for golden parachute excise tax gross ups.

Clawback Policy. We maintain a clawback policy for the recovery of performance-based compensation (both cash and equity) in the event of a substantial financial restatement.	× **No Excessive Perks**. We generally do not provide any executive-specific perquisites to our NEOs. We do not provide a matching contribution or preferential interest rates in our deferred compensation plans.

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Our Compensation Practices

Robust Stock Ownership Guidelines. All of our NEOs are in compliance with our Stock Ownership Guidelines as of the end of fiscal year 2017: Dr. de Geus held 544,529 shares of our common stock, valued at over 90 times his salary and Dr. Chan held 200,622 shares, valued at over 33 times his salary.	× **No Hedging or Pledging.** 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.
Compensation Committee Independence. Our Compensation Committee is composed solely of independent directors. The Compensation Committee regularly meets in executive sessions without management present.	× **No Option Repricing.** Our 2006 Employee Equity Incentive Plan forbids the repricing of equity awards without stockholder approval and contains other features designed to protect stockholder interests.
Independent Compensation Consultant. 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.	
Advisory Say-on-Pay Vote. Our Board of Directors elected to hold an annual advisory say-on-pay vote, and our Compensation Committee considers the outcome of our favorable vote in making compensation decisions.	
Comprehensive Review of Executive Compensation. In addition to considering the outcome of the annual advisory say-on-pay vote, our Compensation Committee also reviews tally sheets of executive compensation, which provide a holistic view of NEO compensation.	
Equity Burn Rate. We continue to closely manage our equity burn rate, limiting gross share usage to 2.1% in fiscal 2017.	

Fiscal 2017 NEO Compensation Details

Our three core elements of NEO direct compensation are salary, an annual cash incentive opportunity and equity awards. Our NEOs are also compensated through our employee health and welfare benefit plans, employee-funded defined contribution deferred compensation plan, and executive change in control and severance benefit plan.

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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. The graphic below reflects the general allocation of the three core elements of NEO direct compensation for fiscal 2017 as determined by our Compensation Committee in December 2016.

Salary

Salaries compensate our NEOs for expected levels of day-to-day performance. Our Compensation Committee believes that salaries should be determined by each NEO s role and responsibilities, our financial projections, peer data, our budget for the coming year, historical salary levels, and the resulting total target compensation that can be earned given the individual s base salary and related target incentive opportunity.

In fiscal 2017, each of our co-CEO s salary was increased by $25,000, or approximately 5% over fiscal 2016, to reflect their continuing success in leading us to profitability for the twelfth consecutive year and to improve the competitiveness of their total target compensation.

In December 2016, the Compensation Committee established Mr. Pham s salary at $395,000. In May 2017, the Compensation Committee further increased Mr. Pham s salary to $425,000, for an aggregate year over year increase of approximately 15% over fiscal 2016, to improve the competitiveness of his total target compensation and to reflect his expanded scope of responsibilities in light of Mr. Beattie s retirement as Chief Administrative Officer (CAO). It was announced on January 30, 2017 that Mr. Beattie would retire effective December 22, 2017. The transition occurred in two phases: Mr. Beattie remained as CAO through the end of the second quarter of fiscal 2017, at which time he transitioned to an executive advisory position through the end of the calendar year.

Mr. Logan s salary increased by $30,000, or approximately 7% over fiscal 2016, to recognize his positive efforts in guiding our sales team despite customer consolidation and a competitive sales

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environment. Neither Mr. Runkel nor Mr. Beattie s salary changed for fiscal 2017, as the Compensation Committee determined that the existing salary levels were consistent with our pay philosophy.

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 earned by our 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 Executive Incentive Plan (EIP), which was last approved by the Compensation Committee in December 2017.

Executive Incentive Plan. For fiscal 2017, the Compensation Committee approved a ***funding goal***, ***cash incentive targets***, ***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 NEO s role and responsibilities, our financial projections, the budget for the coming year, peer data, historical compensation levels and the resulting total target compensation that can be earned given the individual s base salary and related target incentive opportunity.

As reflected in the graphic above, for fiscal 2017, the Compensation Committee increased our co-CEO s cash incentive target from 220% to 240% in order to reflect their continuing success in leading us to profitability for the twelfth consecutive year and to improve the competitiveness of their total target compensation. In May 2017, the Compensation Committee increased Mr. Pham s fiscal 2017 cash incentive target from 80% to 90% in order to reflect his expanded scope of responsibilities in light of Mr. Beattie s resignation as Chief Administrative Officer. The cash incentive target of Mr. Beattie, Mr. Logan and Mr. Runkel did not increase in fiscal 2017, as the Compensation Committee determined that the existing levels were consistent with our pay philosophy.

Performance Goals. The EIP requires our NEOs to achieve a high level of performance each year for any payments to be earned under the plan. On an annual basis, our Compensation Committee sets a funding goal for the EIP as well as performance goals based on revenue, operating margin, and revenue backlog. As an initial threshold, we must achieve our funding goal in order for any amounts to be earned under the EIP. If we fail to achieve our funding goal, no cash incentive payments will be earned under the EIP. Assuming the funding goal is achieved, we must still achieve at least a 90% average performance level for our ***Corporate Financial Goals***, before any cash incentive payment may be earned. In addition, 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 (1) current fiscal year revenue, (2) current year non-GAAP operating margin, and (3) future years revenue backlog to focus our NEOs on revenue growth and cost control for the current fiscal year and future revenue

and revenue predictability. We use non-GAAP operating margin as a metric for both our funding goal and as a component of our Corporate Financial Goals because of its important connection to our overall profitability in the current fiscal year. We use current fiscal year

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revenue as a metric for our Corporate Financial Goals to reward efforts to expand our business. We use revenue backlog based on two subsequent years of revenue backlog to 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 permits 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 the numeric goals for each performance metric based on the operating plan approved by our Board of Directors.

Fiscal 2017 Funding Goal, Corporate Financial Goals, Revenue Predictability Goal and Goal Achievement

Fiscal 2017 Funding Goal (initial threshold)	Fiscal 2017 Target Achieved
70% of Fiscal 2017 non-GAAP operating margin(1)	Yes

Corporate Financial Goals	Performance Weight	Fiscal 2017 Target	Fiscal 2017 % Achieved
Fiscal 2017 revenue	33.33%	$ 2.606 billion	104.6%
Fiscal 2017 non-GAAP operating margin(1)	33.33%	23.1%	103.0%
Fiscal 2018 revenue backlog(2)	33.34%	$ 1.988 billion	107.0%
Average Achievement			104.9%

Revenue Predictability Goal	Fiscal 2017 Target	Fiscal 2017 % Achieved
Fiscal 2019 revenue backlog(2)	(3)	120.1%

(1) Non-GAAP operating margin is GAAP operating margin adjusted to exclude the amortization of acquired intangible assets, the impact of stock compensation, acquisition-related costs, restructuring charges, legal matters, a repatriation of offshore cash, and the income tax effect of non-GAAP pre-tax 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.

We achieved strong financial results in fiscal 2017, with an average achievement of our three Corporate Financial Goals of 104.9%. We also performed well against our Revenue Predictability Goal, achieving 120.1% 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 earned at each level of achievement of our Corporate Financial Goals. The EIP requires a minimum average performance achievement of 90% for our Corporate Financial Goals before our NEOs can earn any cash incentive payment. At this level of achievement under the EIP, the payout matrix provides funding of 67.5% of target payment for 90% average performance achievement.

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.

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Overview of Fiscal 2017 Payout Matrix

Average Achievement of Corporate Financial Goals	Corporate Financial Payout Factor(1)
³125%	150%
103%	112.7%
100%	100%
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 104.9%, the Corporate Financial Payout Factor is 119.3% for fiscal 2017.

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

The EIP Payment Formula above will not be applicable, and our NEOs will not earn any cash incentive payments under the EIP, if the funding goal is not achieved for the fiscal year.

Actual Fiscal 2017 Cash Incentive Payments. Actual cash incentive payments are only earned 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. In no event can an actual cash incentive payment exceed 200% of the NEO s cash incentive target.

Our Compensation Committee convened in December 2017 to discuss the fiscal 2017 performance of each of our NEOs, review potential cash incentive payments, and determine the actual incentive payments. Based on our achievement of EIP performance goals, the calculation of cash incentive

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payments using the EIP s payment formula yielded awards of 196.8% of our NEOs targets, which is based on:

After considering a number of factors, including internal cost considerations, the Compensation Committee reduced the total EIP awards by approximately 14.0% in the aggregate to yield awards of 172.6% of our NEOs targets as a group, in the following amounts:

NEO	Target Cash Incentive Payment	Actual Cash Incentive Payment
Aart J. de Geus	$ 1,260,000	$ 2,395,000
Chi-Foon Chan	1,260,000	2,395,000
Trac Pham	382,500	695,000
Joseph W. Logan	660,000	1,255,000
John F. Runkel, Jr.	245,000	404,300
Brian M. Beattie	506,000	300,000

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 generally 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 2017 Equity Grants

NEO	Stock Options(1)	Promotional Stock Options	Promotional RSUs	RSU Shares(2)	Grant Date Fair Value of Equity Awards
Aart J. de Geus	160,899			30,644	$3,728,152
Chi-Foon Chan	160,899			30,644	3,728,152
Trac Pham	47,835	18,774(3)	3,521(3)	9,110	1,608,303
Joseph W. Logan	86,973			16,565	2,015,265
John F. Runkel, Jr.	32,832			6,253	760,742
Brian M. Beattie					

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(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 $480.0 million for fiscal 2017.

(3) In May 2017, Mr. Pham received a promotional stock option grant and a promotional restricted stock unit to reflect his expanded scope of responsibilities in light of Mr. Beattie s retirement as Chief Administrative Officer.

Co-CEOs. The Compensation Committee approved an estimated target dollar value of $3.7 million for the equity grants to each of our co-CEOs, an increase of approximately 5.7% from fiscal 2016, to recognize their significant contributions in leading the company and helping us achieve our corporate goals despite recent industry and customer consolidation, and help improve the competitiveness of our co-CEOs total target compensation. 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 approved an estimated target dollar value of $1.6 million for the equity grants to Mr. Pham, which consists of $1.1 million in December 2016 and $500,000 in May 2017, for an aggregate year over year increase of approximately 65.8% from fiscal 2016, to recognize his continued development in his role, to improve the competitiveness of his total target compensation, which was below the 25th percentile of our peer group for fiscal 2016, and to enhance the overall retention features of his total compensation package. The Compensation Committee approved an estimated target dollar value of $2.0 million for the equity grants to Mr. Logan, an increase of approximately 21.2% from fiscal 2016, to recognize the continuing importance of his role in guiding our overall performance.

Allocation. After choosing the estimated 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 approximate 50/50 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 2017, the Compensation Committee used our closing stock price on the grant date to calculate an award worth half of the estimated 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. Because the grants were based on estimates of conditions on the grant date, the actual grant date fair value of the PRSUs and stock options reported in the Summary Compensation Table below is different, as it is based on our value on the effective grant date.

PRSUs Terms. As in past years, the Compensation Committee selected a non-GAAP net income goal for our fiscal 2017 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 the amortization of acquired intangible assets, the impact of stock compensation, acquisition-related costs, restructuring charges, legal matters, and the income tax effect of non-GAAP pre-tax adjustments. Our fiscal 2017 goal was increased above our fiscal 2016 goal to a non-GAAP net income of $480 million.

Our PRSUs vest 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.

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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:

Percentage Achievement of PRSU Non-GAAP Net Income Performance Goal

(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 2017 PRSU Achievement. We achieved 110.2% of our fiscal 2017 non-GAAP net income performance goal of $480.0 million, and accordingly, 25% of our NEOs fiscal 2017 PRSUs vested on December 8, 2017. The remaining 75% of the shares are scheduled to vest in three equal annual installments beginning on December 8, 2018, 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	30,644	30,644
Chi-Foon Chan	30,644	30,644
Trac Pham	9,110	9,110
Joseph W. Logan	16,565	16,565
John F. Runkel, Jr.	6,253	6,253
Brian M. Beattie		

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. In May 2017, the Compensation Committee granted Mr. Pham a promotional stock option grant and a promotional service-based RSU to reflect his expanded scope of responsibilities in light of Mr. Beattie s resignation as Chief Administrative Officer. Mr. Pham s promotional stock option vests quarterly over four years and his RSU vests annually over four years, in each case subject to his continued service with us.

NEO	Promotional Stock Options	Promotional RSUs	Grant Date Fair Value of Equity Awards
Trac Pham	18,774	3,521	$499,954

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No other NEOs received new-hire, promotional or special recognition equity awards in fiscal 2017.

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.

Perquisites and Other Benefits. No executive perquisites or other special executive benefits were given to our NEOs in fiscal 2017. 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 current executive officers 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 for 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 of Employment 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 help retain the focused services of Drs. de Geus and Chan in the event of a change of

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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 our outstanding equity awards, our equity incentive plans generally provide that all employee awards will fully vest. 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 2018 NEO Target Compensation Decisions

In setting fiscal 2018 compensation, the Compensation Committee considered the positive results of our stockholders say-on-pay votes as well as the Compensation Committee s belief that our compensation policy remains aligned with our corporate strategy. Our overall compensation philosophy for fiscal 2018 remains consistent with our philosophy for fiscal 2017, 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 2017, and set the levels of achievement based on our corporate financial plan for fiscal 2018.

At its meetings in December 2017, the Compensation Committee made several adjustments to individual NEO compensation levels for fiscal 2018:

Co-CEOs. The Compensation Committee increased each of our co-CEO s overall target compensation by approximately 14.6% to reflect their contributions in significantly growing the company from both a business and financial standpoint. For fiscal 2018, the estimated target dollar value of the equity grants for each of our co-CEOs increased by approximately $800,000, or approximately 21.6% over fiscal 2017. As in fiscal 2017, the target dollar value of the equity grants was split approximately equally between PRSU and stock options. Even with such increases, total target compensation for each of our co-CEOs is below the median, aligned with the bottom 25th percentile of our peer group.

Other NEOs. To reflect Mr. Pham s promotion and continued development in his expanded role as well as improve the competitiveness of his overall compensation as compared to our peers, the Compensation

Committee increased Mr. Pham s overall target compensation by approximately 22.8% over the level in effect at the end of fiscal 2017. The Compensation Committee increased the estimated target dollar value of his equity grants by approximately $550,000, or approximately 34.4% over the level in effect at the end of fiscal 2017, with the total value split approximately equally between PRSUs and stock options. No changes were made to Mr. Pham s fiscal 2018 salary or cash incentive target percentage.

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Mr. Runkel s overall target compensation was increased by approximately 6.5% to improve the competitiveness of his overall compensation as compared to our peers. Mr. Runkel s salary was increased by $25,000, or approximately 7.1% over fiscal 2017, to $375,000. The Compensation Committee also increased the estimated target dollar value of his equity grants by $45,000, or approximately 6.0% over fiscal 2017, split approximately equally between PRSUs and stock options.

No changes were made to Mr. Logan s target compensation for fiscal 2018 as the Compensation Committee determined his existing target levels were consistent with our pay philosophy.

For fiscal 2018, performance-based compensation is targeted at approximately 92.0% of total direct compensation for our co-CEOs and at approximately 83.7% 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:

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

Pay for Performance

Underlying these objectives is our ***pay for performance*** philosophy. A large majority of each NEO s target total direct compensation is performance-based that is, contingent upon the overall performance of our business and our stock performance. We believe the 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 is comprised of 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 fiscal 2017, the Compensation Committee reviewed and approved:

The level of achievement of financial performance goals for the prior fiscal year;

Annual incentive compensation earned, if any, based on the 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.

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Role of Compensation Committee Consultant

Our Compensation Committee directly retained the services of Radford, an Aon company, as an independent compensation consultant for fiscal 2017. 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 2017, the services provided by Radford included:

- Assisting in the selection of our peer group companies for fiscal 2018 (and with the determination of our fiscal 2017 peer group in fiscal 2016);
- 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 $92,000 in fees to Radford during fiscal 2017 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 2017, the Compensation Committee selected the peer group companies listed below because they: (i) were business or labor market competitors in the software (excluding gaming and e-commerce) or fabless semiconductor industries; (ii) generated annual revenues between approximately 0.5 and 2.5 times Synopsys revenue (approximately $1.1 billion to $5.7 billion); and (iii) had a market capitalization between approximately 0.5 and 3.0 times Synopsys market capitalization (approximately $3.7 billion to $22.0 billion). At the time of the selection in July 2016, Synopsys had total revenue for the previous twelve months of approximately $2.30 billion and a market capitalization of approximately $7.30 billion.

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Fiscal 2017 Peer Group

ANSYS, Inc.	Microchip Technology Inc.
Autodesk, Inc.	Nuance Communications, Inc.
CA, Inc.	Open Text Corporation
Cadence Design Systems, Inc.	PTC Inc.
Citrix Systems, Inc.	Red Hat, Inc.
Intuit Inc.	Symantec Corporation
Linear Technology Corporation	Trimble Navigation Ltd.
Marvell Technology Group Ltd.	Xilinx, Inc.
Mentor Graphics Corporation	

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 2017, the Compensation Committee referred to the 25th to 75th percentiles of our peers 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.

Fiscal 2017 total target compensation for each of our co-CEOs was below the 25th 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.

Role of Management

Our Compensation Committee discusses NEO performance assessments and compensation targets with Dr. de Geus and our Human Resources and Facilities Officer. 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 Human Resources and Facilities Officer. 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 4 above. In 2017, we held our seventh annual advisory stockholder vote on our executive compensation. Last year s proxy statement detailed our fiscal 2016 named executive compensation as well as important compensation decisions for fiscal 2017, including fiscal 2017 NEO salaries, equity grants, and the metrics that would be used in determining achievement of performance-based compensation.

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Approximately 94% of voted shares approved our named executive officer 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 our historical voting results demonstrates strong support for its decision to maintain a similar compensation philosophy and structure each year.

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 current NEOs are: Dr. de Geus 50,000 shares; Dr. Chan 50,000 shares; Mr. Pham 10,000 shares; Mr. Logan 10,000 shares; and Mr. Runkel 10,000 shares.

As of January 1, 2018, each of our NEOs held the recommended number of shares. Our co-CEOs each held at least four 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 such 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. Even with executing $400 million in share repurchases during the fiscal year, our gross share usage was limited to 2.1% for fiscal 2017.

Tax Deductibility of NEO Compensation. Prior to 2018, Section 162(m) of the Code generally limited the amount of compensation companies could deduct for annual federal income tax purposes to $1,000,000 for NEOs (other than for chief financial officers), unless the compensation qualified as performance-based under Section 162(m). In years prior to 2018, our Compensation Committee has considered the deductibility of the compensation it awards. As a general matter, our Compensation Committee 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: (i) 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 (ii) 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.

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No Hedging Transactions. Our insider trading policy prohibits our employees, including our NEOs, and directors from engaging in hedging transactions (as defined in our policy) 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.

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 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 December 2017, our Compensation Committee conducted an assessment of our company-wide compensation arrangements. 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.

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The Compensation Committee considered the following, among other factors:

Our revenue model and our cash incentive plan that is available to both executives and non-executive employees 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.

The allocation of compensation among our core compensation elements effectively balances short-term performance and long-term performance.

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 employees 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 employees from taking risky actions to meet a single target with an all-or-nothing result of compensation or no compensation.

Our Executive Incentive Plan caps cash incentive payments at a maximum award size. In addition, the Compensation Committee retains negative discretion to reduce our employees 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.

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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

* 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.

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During fiscal 2017, 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 2017, 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 2017, served as a member of a board of directors or compensation committee of any entity that has or, during fiscal 2017, had one or more executive officers serving as a member of our Board or Compensation Committee.

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Summary Compensation Table

The following table shows compensation awarded to, paid to, or earned by each of our NEOs for fiscal 2017: Dr. de Geus and Dr. Chan, our co-Chief Executive Officers; Mr. Pham, our Chief Financial Officer; Mr. Logan, our Sales and Corporate Marketing Officer; Mr. Runkel, our General Counsel and Corporate Secretary; and Mr. Beattie, our Former Executive Vice President, Business Operations and Chief Administrative Officer (collectively, NEOs). The table shows compensation for services performed during fiscal 2017, fiscal 2016, and fiscal 2015.

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)
Art J. de Geus	2017	$ 525,000	$	$ 1,849,978	$ 1,878,174	$ 2,395,000	$ 4,000	$ 6,652,152
	2016	500,000		1,749,994	1,683,250	1,753,000	28,808	5,715,052
Co-Chief Executive Officer	2015	500,000		1,250,030	1,324,955	1,815,000	29,154	4,919,139
and Chairman of the Board								
of Directors								
Chi-Foon Chan	2017	$ 525,000	$	$ 1,849,978	$ 1,878,174	$ 2,395,000	$ 4,000	$ 6,652,152
	2016	500,000		1,749,994	1,683,250	1,753,000	26,884	5,713,128
Co-Chief Executive Officer								
and President	2015	500,000		1,250,030	1,324,955	1,815,000	27,230	4,917,215
Trac Pham	2017	$ 409,000	$	$ 799,926	$ 808,376	$ 695,000	$ 4,000	$ 2,716,302
	2016	370,000		482,514	464,092	524,100	15,058	1,855,764
Chief Financial Officer	2015	350,000		350,005	370,990	462,000	15,500	1,548,495
Joseph W. Logan	2017	$ 440,000	$	$ 1,000,029	$ 1,015,235	$ 1,255,000	$ 3,000	$ 3,713,264
	2016	410,000		824,995	793,528	1,089,500	23,769	3,141,792
Sales and Corporate								
Marketing Officer	2015	400,000		700,010	741,979	1,008,000	23,769	2,873,758
John F. Runkel, Jr.	2017	$ 350,000	$	$ 377,493	$ 383,247	$ 404,300	$ 4,000	$ 1,519,040
	2016	350,000		377,490	363,100	404,600	7,446	1,502,636
General Counsel and								
Corporate Secretary	2015	350,000		362,522	384,237	404,300	7,743	1,508,802
Brian M. Beattie	2017	$ 440,000	$	$	$	$ 300,000	$ 4,000	$ 744,000
	2016	440,000		482,514	464,092	710,800	26,442	2,123,848
Former Executive VP	2015	440,000		550,020	821,481	759,000	26,565	2,597,066
Business Operations and Chief								

Administrative Officer

(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 2017, fiscal 2016, and fiscal 2015 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 2017 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 2017, fiscal 2016, and fiscal 2015, as applicable, under our Executive Incentive Plan (EIP).

(3) Amounts include the following:

Name	401(k) Matching Contributions ($)(A)	HSA Matching Contributions ($)(B)	Total ($)
Aart J. de Geus	$ 3,000	$ 1,000	$ 4,000
Chi-Foon Chan	$ 3,000	$ 1,000	$ 4,000
Trac Pham	$ 3,000	$ 1,000	$ 4,000
Joseph W. Logan	$ 3,000	$	$ 3,000
John F. Runkel, Jr.	$ 3,000	$ 1,000	$ 4,000
Brian M. Beattie	$ 3,000	$ 1,000	$ 4,000

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(A) Amounts include matching contributions made by Synopsys under our tax-qualified 401(k) plan, which provides for broad-based U.S. employee participation.

(B) 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.

(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.

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Grants of Plan-Based Awards

The following table sets forth certain information with respect to grants of plan-based awards in fiscal 2017 to our NEOs, including cash awards and equity awards. The equity awards granted to our NEOs in fiscal 2017 were granted under our 2006 Employee Equity Incentive Plan.

		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 or Stock of Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards	Gra Fai and Av
	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)	(#)	(#)(3)	($/Sh)(4)	
e Geus	12/15/2016	$ 850,500	$ 1,260,000	$ 2,520,000							
	12/15/2016				15,332	30,664	30,664				$ 1,
	12/15/2016								160,899	$ 60.37	$ 1,
n Chan	12/15/2016	$ 850,500	$ 1,260,000	$ 2,520,000							
	12/15/2016				15,332	30,664	30,664				$ 1,
	12/15/2016								160,899	$ 60.37	$ 1,
am	12/15/2016	$ 258,188	$ 382,500	$ 765,000							
	12/15/2016				4,555	9,110	9,110				$
	12/15/2016								47,835	$ 60.37	$
	5/19/2017							3,521(6)			$
	5/19/2017								18,774(7)	$ 70.99	$
V. Logan	12/15/2016	$ 445,500	$ 660,000	$ 1,320,000							
	12/15/2016				8,283	16,565	16,565				$ 1,
	12/15/2016								86,973	$ 60.37	$ 1,
Runkel, Jr.	12/15/2016	$ 165,375	$ 245,000	$ 490,000							
	12/15/2016				3,127	6,253	6,253				$
	12/15/2016								32,832	$ 60.37	$
. Beattie	12/15/2016	$ 341,550	$ 506,000	$ 1,012,000							

(1) Represents possible cash awards for fiscal 2017 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 40 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. Mr. Beattie ultimately received less than his Threshold amount as he served as an NEO for less than the full fiscal 2017. The amounts listed under the Target column represent the cash awards payable in fiscal 2017 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 $4,000,000 or 200% of the NEO s target variable cash incentive compensation. Actual cash awards paid to the NEOs for fiscal 2017 are reported in the Summary

Compensation Table on page 62 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 $480.0 million of non-GAAP net income for fiscal 2017, as further described in Compensation Discussion and Analysis beginning on page 40 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 8, 2017, and the remaining 75% of each respective award is scheduled to vest in three equal annual installments beginning on December 8, 2018, 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, 2016, the effective date of grant of these awards.

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(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 2017 Annual Report on Form 10-K.

(6) 25.0% of the shares subject to such restricted stock unit award vest on the first anniversary of the grant date, and vesting will continue as to 25.0% of such shares annually thereafter, so long as the NEO provides continuous services to us.

(7) 25.0% of the shares subject to such non-statutory stock options vest on the first 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.

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Outstanding Equity Awards at Fiscal 2017 Year-End

The following table summarizes the number of securities underlying outstanding equity awards for our NEOs as of October 28, 2017, the end of fiscal 2017:

	Option Awards					Stock Awards			
Name	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	12/12/2012	160,000		$ 32.38	12/12/2019		$		$
	12/12/2013	146,343	9,757(2)	38.07	12/12/2020				
	12/12/2013					8,725(3)	760,732		
	12/12/2014	116,135	52,789(4)	42.43	12/12/2021				
	12/12/2014					14,730(5)	1,284,308		
	12/15/2015	81,815	105,192(6)	45.23	12/15/2022				
	12/15/2015					29,018(7)	2,530,079		
	12/15/2016	30,169	130,730(8)	60.37	12/15/2023				
	12/15/2016							30,644(9)	2,671,850
Chi-Foon Chan	12/12/2012	40,000		$ 32.38	12/12/2019		$		$
	12/12/2013	107,318	9,757(2)	38.07	12/12/2020				
	12/12/2013					8,725(3)	760,732		
	12/12/2014	116,135	52,789(4)	42.43	12/12/2021				
	12/12/2014					14,730(5)	1,284,308		
	12/15/2015	81,815	105,192(6)	45.23	12/15/2022				
	12/15/2015					29,018(7)	2,530,079		
	12/15/2016	30,169	130,730(8)	60.37	12/15/2013				
	12/15/2016							30,644(9)	2,671,850
Trac Pham	05/24/2013	875		$ 35.71	5/24/2020		$		$
	05/23/2014	1,077	1,077(10)	39.09	5/23/2021				
	05/24/2014					1,438(11)	125,379		
	12/12/2014	8,869	14,781(4)	42.43	12/12/2021				
	12/12/2014					4,124(5)	359,571		
	12/15/2015	22,557	29,003(6)	45.23	12/15/2022				
	12/15/2015					8,001(7)	697,607		
	12/15/2016	8,969	38,866(8)	60.37	12/15/2023				
	12/15/2016							9,110(9)	794,300
	05/19/2017	1,174	17,600(12)	70.99	05/19/2024				

	05/19/2017					3,521(13)	306,995			
Joseph W. Logan	12/08/2011	10,313		$ 27.65	12/08/2018		$		$	
	12/12/2012	60,000		32.38	12/12/2019					
	12/12/2013	60,750	4,050(2)	38.07	12/12/2020					
	12/12/2013	23,437	1,563(2)	38.07	12/12/2020					
	12/12/2013					3,625(3)	316,063			
	12/12/2014	65,036	29,562(4)	42.43	12/12/2021					
	12/12/2014					8,248(5)	719,143			
	12/15/2015	38,570	49,590(6)	45.23	12/15/2022					
	12/15/2015					13,680(7)	1,192,759			
	12/15/2016	16,307	70,666(8)	60.37	12/15/2023					
	12/15/2016							16,565(9)	1,444,302	
John F. Runkel, Jr.	05/23/2014	5,625	8,438(14)	$ 39.09	05/23/2021		$		$	
	12/12/2014	9,616	15,309(4)	42.43	12/12/2021					
	12/12/2014					4,272(5)	372,475			
	12/15/2015	17,649	22,691(6)	45.23	12/15/2022					
	12/15/2015					6,259(7)	545,722			
	12/15/2016	6,156	26,676(8)	60.37	12/15/2023					
	12/15/2016							6,253(9)	545,199	
Brian M. Beattie	12/12/2013		3,869(2)	$ 38.07	12/12/2020		$		$	
	12/12/2013	9,375	625(2)	38.07	12/12/2020					
	12/12/2013					3,450(3)	300,805			
	12/12/2014	33,279	32,730(4)	42.43	12/12/2021					
	12/12/2014					6,481(5)	565,078			
	12/15/2015	22,557	29,003(6)	45.23	12/15/2022					
	12/15/2015					8,001(7)	697,607			

(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 $87.19 on October 27, 2017, the last trading day of fiscal 2017, as reported on the NASDAQ Global Select Market.

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(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, 2014 and 6.25% became exercisable quarterly thereafter until the remaining 6.25% vested subsequent to fiscal year end on December 12, 2017.

(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 $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 December 8, 2016, respectively, and the remaining 25% vested subsequent to fiscal year end on December 8, 2017.

(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, 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.

(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 $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 December 8, 2016, and subsequent to fiscal year end on December 8, 2017, respectively, and the remaining 25% are scheduled to vest on December 8, 2018, 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 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.

(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 $454.0 million of non-GAAP net income for fiscal 2016. This goal was achieved and, accordingly, 25% of the target awards vested on December 15, 2016 and subsequent to fiscal year end on December 8, 2017, respectively, and the remaining 50% are scheduled to vest in two equal annual installments beginning on December 8, 2018, 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, 2017 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, 2020.

(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 $480.0 million of non-GAAP net income for fiscal 2017 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 fiscal year end on December 8, 2017, and the remaining 75% are scheduled to vest in three equal annual installments beginning on December 8, 2018, so long as the NEO provides continuous services to us.

(10) 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.

(11) 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, June 15, 2016, and June 15, 2017, respectively, and the remaining 25% are scheduled to vest on June 15, 2018, 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 19, 2017 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 19, 2021.

(13) This restricted stock unit award vests in four equal annual installments beginning on June 15, 2018, so long as Mr. Pham provides continuous services to us.

(14) 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.

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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 2017.

	Option Awards		Stock Awards	
Name	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	$8,671,260	39,088	$2,328,562
Chi-Foon Chan	40,000	1,523,532	39,088	2,328,562
Trac Pham	38,765	1,261,857	8,168	528,665
Joseph W. Logan			17,310	1,031,489
John F. Runkel, Jr.	30,000	720,720	9,223	622,778
Brian M. Beattie	88,631	3,503,712	13,933	829,193

(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).

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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 2017 ($)(1)	Synopsys, Inc. Contributions in Fiscal 2017 ($)	Aggregate Earnings in Fiscal 2017 ($)(2)	Aggregate Withdrawals/ Distributions in Fiscal 2017 ($)	Aggregate Balance at End of Fiscal 2017 ($)

Aart J. de Geus	$	$	$	$	
Chi-Foon Chan			1,125,154(3)		7,070,782(4)
Trac Pham		511,784(5)	332,589(6)	340,203	2,591,913(7)
Joseph W. Logan					
John F. Runkel, Jr.		182,070(5)	109,949(6)		553,252(8)
Brian M. Beattie		533,092(5)	1,047,112(6)		5,941,955(9)

(1) All contributions in fiscal 2017 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 62.

(3) All of these aggregate earnings were accrued under the Deferred Compensation Plan I.

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(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 2016 though paid in fiscal 2017.

(6) All of these aggregate earnings were accrued under the Deferred Compensation Plan II.

(7) Includes (a) $511,784 of cash incentive compensation reported in the Summary Compensation Table under the Non-Equity Incentive Plan Compensation column for services performed in fiscal 2016 though paid in fiscal 2017 and (b) $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 2017 was subject to the Deferred Compensation Plan II.

(8) Includes (a) $182,070 of cash incentive compensation reported in the Summary Compensation Table under the Non-Equity Incentive Plan Compensation column for services performed in fiscal 2016 though paid in fiscal 2017 and (b) $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. The entire aggregate balance at the end of fiscal 2017 was subject to the Deferred Compensation Plan II.

(9) Includes (a) $533,092 of cash incentive compensation reported in the Summary Compensation Table under the Non-Equity Incentive Plan Compensation column for services performed in fiscal 2016 though paid in fiscal 2017 and (b) $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. The entire aggregate balance at the end of fiscal 2017 was subject to the Deferred Compensation Plan II.

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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 52.

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 28, 2017, the last day of fiscal 2017. The payments set forth below are payable to: (1) Dr. de Geus and Dr. Chan pursuant to their employment agreements; (2) to Mr. Pham, Mr. Logan, and Mr. Runkel, in their capacity as executive officers, pursuant to the Executive Change of Control Severance Benefit Plan; and (3) Mr. Beattie, upon his transition from his role as an executive officer, under the Company s broad based Amended and Restated Change of Control Severance Benefit Plan, in each case, as in effect on the last day of fiscal 2017.

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. 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.

Upon Mr. Beattie s transition from his role as an executive officer to his role as an executive advisor, Mr. Beattie became eligible to participate in the Synopsys Amended and Restated Change of Control Severance Benefit Plan, which provides benefits for certain employees, if such employee s employment with us is terminated without cause within 30 days before or 6 months after a change of control or there is a constructive termination of the employee s

employment within 6 months after a change of control. The benefits consist of: (1) a cash severance payment equal to 6 months of salary, payable in a lump sum; (2) 50% of the employee s target cash incentive payment, payable in a lump sum; (3) a lump-sum cash payment equal to the estimated cost of health care premiums for 6 months;

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and (4) full acceleration of all unvested stock options and other equity awards held by the employee at the time of termination. An employee 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 a 6-month non-competition agreement in order to receive benefits should a qualifying termination occur. The plan does not provide any benefits if the employee 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 RSU Awards(1)	Intrinsic Value of Unvested Option Awards(1)
Aart J. de Geus	$ 1,050,000	$ 2,520,000	$ 17,370	$ 7,246,971	$ 10,762,134
Chi-Foon Chan	1,050,000	2,520,000	21,652	7,246,971	10,762,134
Trac Pham	425,000	765,000(2)	20,114	2,283,854	3,257,873
Joseph W. Logan	440,000	1,320,000(2)	27,020	3,672,268	5,574,964
John F. Runkel, Jr.	350,000	490,000(2)	20,114	1,463,396	2,758,663
Brian M. Beattie	220,000	253,000	7,217	1,563,491	2,902,705

(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 27, 2017, the last trading day of fiscal 2017, of $87.19 as reported on the NASDAQ Global Select Market.

(2) The last day of our fiscal 2017 was Saturday, October 28, 2017. 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. Logan, and Mr. Runkel in the event of their terminations in connection with a change of control as of October 28, 2017, each would be entitled to two times his target cash incentive payment, given that each would have worked the entirety of fiscal 2017 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 28, 2017, the last day of fiscal 2017. 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 RSU	Intrinsic Value of Unvested Option

				Awards(1)	**Awards(1)**
Aart J. de Geus	$	$	$	7,246,971	$ 10,762,134
Chi-Foon Chan				7,246,971	10,762,134
Trac Pham				2,283,854	3,257,873
Joseph W. Logan				3,672,268	5,574,964
John F. Runkel, Jr.				1,463,396	2,758,663
Brian M. Beattie				1,563,491	2,902,705

(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 27, 2017, the last trading day of fiscal 2017, of $87.19 as reported on the NASDAQ Global Select Market.

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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 28, 2017, the last day of fiscal 2017. 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	$ 525,000	$ 1,260,000	$ 11,580	$	$
Chi-Foon Chan	525,000	1,260,000	14,435		
Trac Pham					
Joseph W. Logan					
John F. Runkel, Jr.					
Brian M. Beattie					

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The following table provides information regarding our equity compensation plans as of October 28, 2017.

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	10,016(4)	$ 47.58	20,079(5)
Equity Compensation Plans Not Approved by Stockholders(6)			
Total	**10,016**	**$ 47.58**	**20,079**

(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 Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights.

(4) Includes (a) 3.8 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 2017 Non-Employee Directors Equity Incentive Plan, and (b) 6.2 million shares of common stock issuable upon exercise of outstanding stock options granted under the 2006 Employee Plan and the 2017 Non-Employee Directors Equity Incentive Plan.

(5) Comprised of (a) 12.7 million shares remaining available for issuance under the 2006 Employee Plan, (b) 0.4 million shares remaining available for issuance under the 2017 Non-Employee Directors Equity Incentive Plan, and (c) 7.1 million shares remaining available for issuance under the Employee Stock Purchase Plan as of October 28, 2017.

(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 $33.87 per share, under various plans assumed in connection with acquisitions of other companies. No shares remain available for future issuance under these acquired plans.

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The Audit Committee of our Board of Directors has selected KPMG LLP, an independent registered public accounting firm, to audit our consolidated financial statements for fiscal 2018. 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 2018.

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 5, vote For this Proposal 5. Abstentions will not be counted as either votes cast For or Against this Proposal 5. 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 2018

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. 28, 2017	Oct. 29, 2016
	(in thousands)	(in thousands)
Audit fees	$ 2,970	$ 2,808
Audit-related fees(1)	836	537

Tax fees(2)	78	123
All other fees(3)	0	0
Total fees	**$ 3,884**	**$ 3,467**

(1) Consists of fees for due diligence services.

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

(3) There were no other products or services provided by KPMG LLP other than as described in the line items above.

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

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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 5 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. All audit-related fees and tax fees, as described in the table above, were approved by the Audit Committee.

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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 2017, 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 Ms. Coleman, Ms. Johnson, 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 Audit Committee, the Audit Committee s discussions with management and the auditors, and the Audit Committee members business and financial experience.

The Audit Committee met ten times during fiscal 2017. 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.

* 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.

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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 2017 financial statements be included in our 2017 Annual Report on Form 10-K.

AUDIT COMMITTEE

Deborah A. Coleman, Chair

Janice D. Chaffin

Mercedes Johnson

Roy Vallee

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The following table sets forth certain information with respect to the beneficial ownership of our common stock as of February 9, 2018 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
Entities associated with **The Vanguard Group, Inc.** 100 Vanguard Blvd. Malvern, PA 19355	15,515,011	10.30%	Based solely on the Schedule 13G/A filed with the Securities and Exchange Commission on February 9, 2018, reporting beneficial ownership as of December 31, 2017. The Vanguard Group has sole dispositive power with respect to 15,250,479 shares, shared dispositive power with respect to 264,532 shares, sole voting power with respect to 211,592 shares, and shared voting power with respect to 54,274 shares.
Entities associated with **Blackrock, Inc.** 55 E. 52nd Street New York, NY 10055	12,640,021	8.40%	Based solely on the Schedule 13G/A filed with the Securities and Exchange Commission on January 23, 2018, reporting beneficial ownership as of December 31, 2017. Blackrock, Inc. has sole dispositive power with respect to 12,640,021 shares and sole voting power with respect to 11,031,096 shares.
Brian M. Beattie Former Executive Vice President, Business Operations and Chief Administrative Officer	123,934	*	Includes stock options to purchase 79,474 shares exercisable by Mr. Beattie within 60 days following February 9, 2018.

Janice D. Chaffin Director	47,029	*	Includes stock options to purchase 34,222 shares exercisable by Ms. Chaffin within 60 days following February 9, 2018. Also includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Chi-Foon Chan Co-Chief Executive Officer, President and Director	662,650	*	Includes stock options to purchase 449,797 shares exercisable by Dr. Chan within 60 days following February 9, 2018.
Bruce R. Chizen Director	38,347	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Deborah A. Coleman Director	36,547	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	1,169,332	*	Includes stock options to purchase 608,822 shares exercisable by Dr. de Geus within 60 days following February 9, 2018. Also includes 14,500 shares owned by Mora Investment Partners L.P.
Mercedes Johnson Director	20,208	*	Includes stock options to purchase 15,302 shares exercisable by Ms. Johnson within 60 days following February 9, 2018. Also includes 2,453 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Joseph W. Logan Sales and Corporate Marketing Officer	382,014	*	Includes stock options to purchase 313,743 shares exercisable by Mr. Logan within 60 days following February 9, 2018.
Chrysostomos L. Max Nikias Director	25,394	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.

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Name of Beneficial Owner(1)	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Shares(2)	Additional Information
Trac Pham Chief Financial Officer	82,160	*	Includes stock options to purchase 64,921 shares exercisable by Mr. Pham within 60 days following February 9, 2018.
John F. Runkel, Jr. General Counsel and Corporate Secretary	65,655	*	Includes stock options to purchase 49,940 shares exercisable by Mr. Runkel within 60 days following February 9, 2018.
John Schwarz Director	24,399	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Roy Vallee Director	65,347	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
Steven C. Walske Director	20,063	*	Includes 5,075 shares of restricted stock that are not vested as of February 9, 2018 and are subject to forfeiture.
All directors and executive officers as a group (14 persons)	2,763,079	1.84%	Includes stock options to purchase 1,616,221 shares exercisable by all directors and executive officers within 60 days following February 9, 2018. Also includes 37,978 shares of restricted stock that are not vested as of February 9, 2018 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 February 9, 2018.

(2)

Percentage of beneficial ownership is based on 150,574,136 shares of common stock outstanding as of February 9, 2018, 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 February 9, 2018, 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.

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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 2017.

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

Since you owned common stock of Synopsys, Inc. at the close of business on February 9, 2018, 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 2017 Annual Report on Form 10-K were distributed and made available on or about February 23, 2018.

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

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?

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.

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

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 nine directors nominated by our Board of Directors to hold office until the next annual meeting of stockholders or until their successors have been elected	**FOR all nominees**
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 3,000,000 shares	**FOR**
3.	To approve an amendment to our Employee Stock Purchase Plan primarily to increase the number of shares available for issuance under the plan by 5,000,000 shares	**FOR**
4.	To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the Proxy Statement	**FOR**
5.	To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending November 3, 2018	**FOR**

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?

The Annual Meeting will be held on April 5, 2018, 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?

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 9, 2018, 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 9, 2018, 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?

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 9, 2018, 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, 148,957,915 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

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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?

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?

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?

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.

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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?

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, 4 and 5. You may vote For or Against, or Abstain from voting. An abstention will not be counted as either a vote cast For or Against.

What if I don t give specific voting instructions?

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 ?

The ratification of the appointment of KPMG LLP as our independent registered public accounting firm for fiscal 2018 (Proposal 5) 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 5.

The election of directors (Proposal 1), the proposal to approve our 2006 Employee Equity Incentive Plan, as amended (Proposal 2), the proposal to approve an amendment to our Employee Stock Purchase Plan (Proposal 3), and the advisory vote to approve executive compensation (Proposal 4) 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 and 4.

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

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

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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?

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?

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?

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, 2017 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* 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 and our investor relations department in the same manner as outlined above.

I also have access to Synopsys, Inc. s 2017 Annual Report on Form 10-K. Is that a part of the proxy materials?

Our Annual Report on Form 10-K for the fiscal year ended October 31, 2017, as filed with the Securities and Exchange Commission on December 14, 2017, 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 2017 Annual Report on Form 10-K is not incorporated into this Proxy Statement and should not be considered proxy solicitation material.

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Where can I find the voting results of the meeting?

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?

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 23, 2018 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 2019, you must do so in writing following the above instructions not earlier than the close of business on September 23, 2018 and not later than the close of business on October 23, 2018. 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 2019 is held more than 30 days before or after April 5, 2018. The section titled Director Nominations on page 15 of this Proxy Statement provides additional information on the director nomination process.

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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 16, 2018

A copy of our 2017 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 5, 2018

The Proxy Statement and our 2017 Annual Report on Form 10-K will be available at

http://materials.proxyvote.com/871607 on or about February 23, 2018.

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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: JANUARY 15, 2018

AMENDMENT APPROVED BY THE STOCKHOLDERS: APRIL 5, 2018

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

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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. For example, 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 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 and Non-GAAP 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

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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; 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. Non-GAAP measure means the closest GAAP measure 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 restructuring charges; (5) legal matters; (6) material tax impacts, such as the repatriation of offshore cash; and (7) the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes, based upon a normalized annual projected non-GAAP tax rate. 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.

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(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).

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(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

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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 Ninety-One Million Five Hundred Ninety-Seven Thousand Two Hundred Forty-Eight (91,597,248) 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

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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 Ninety-One Million Five Hundred Ninety-Seven Thousand Two Hundred Forty-Eight (91,597,248) 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,

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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;

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(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

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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

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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

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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

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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

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Common Stock are withheld with a value exceeding the maximum statutory tax rate of the Participant s applicable jurisdiction(s) (or such other rate 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 (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.

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(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

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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

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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.

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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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SYNOPSYS, INC.

EMPLOYEE STOCK PURCHASE PLAN

(As amended by approval of the Board of Directors on December 15, 2015

and approved by the stockholders on April 5, 2018)

I. PURPOSE

The Synopsys, Inc. Employee Stock Purchase Plan (the Plan) is intended to provide Eligible Employees of the Company and one or more of its Corporate Affiliates with the opportunity to acquire a proprietary interest in the Company through purchases of shares of the Company s common stock.

II. DEFINITIONS

For purposes of the Plan, the following terms shall have the meanings indicated.

Board means the Company s Board of Directors or its delegate, as applicable, to the extent the Board has delegated its authority to administer the Plan pursuant to Section III.

Code means the Internal Revenue Code of 1986, as amended from time to time.

Committee means a committee of Board members that will satisfy Rule 16b-3 of the Securities and Exchange Commission, as in effect with respect to the Company from time to time.

Company means Synopsys, Inc., a Delaware corporation, and any corporate successor to all or substantially all of the assets or voting stock of Synopsys, Inc. that shall by appropriate action adopt the Plan.

Common Stock means shares of the Company s common stock.

Corporate Affiliate means any parent or subsidiary of the Company as such terms are defined in Rule 405 of the Securities Act, including any such parent or subsidiary that becomes such after the Effective Date.

Earnings has the meaning ascribed to it in the applicable Offering Document.

Effective Date means January 27, 2010, the date this amended and restated Plan was approved by the Board.

Eligible Employee means an Employee who meets the requirements set forth in the applicable Offering Document for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

Employee means any person who is treated as an employee in the records of the Company or a Corporate 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.

Fair Market Value means fair market value per share of Common Stock, as determined on any relevant date in accordance with the following procedures:

(i) 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 for such stock 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 of determination, as reported in such source as 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 (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, then the Fair Market Value per share of the Common Stock on such date shall be determined by the Board, after taking into account such factors as the Board deems appropriate.

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Offering means the grant of Purchase Rights to purchase shares of Common Stock under the Plan to Eligible Employees under terms approved by the Board and set forth in an Offering Document.

Offering Date means a date selected by the Board for an Offering to commence and specified in the Offering Document.

Offering Document means the document setting forth the terms of an Offering as approved by the Board.

Offering Period means the duration of an Offering, as set forth in the Offering Document.

Original Effective Date means the first day of the initial Offering scheduled to commence upon the later of (i) February 1, 1992 or (ii) the effective date of the S-8 Registration Statement covering the shares of Common Stock issuable under the Plan.

Participant means any Eligible Employee of a Participating Company who is actively participating in the Plan.

Participating Company means the Company and such Corporate Affiliate or Corporate Affiliates as may be designated from time to time by the Board, the Employees of which may qualify as Eligible Employees that may participate in an Offering.

Period of Participation means each period for which the Participant actually participates in an Offering.

Plan Administrator means any Committee or other group of persons that has been delegated authority to administer the Plan pursuant to Section III.A.

Purchase Date means one or more dates during an Offering established by the Board and set forth in the Offering Document on which Purchase Rights shall be exercised and purchases of shares of Common Stock shall be carried out in accordance with such Offering.

Purchase Right means an option to purchase shares of Common Stock granted pursuant to the Plan under the terms set forth in the Plan and the applicable Offering Document.

Securities Act means the Securities Act of 1933, as amended.

III. ADMINISTRATION

A. The Plan shall be administered by the Board or its designee (each such designee is a Plan Administrator). As of the Effective Date, the Board has designated the Compensation Committee of the Board as the Plan Administrator. The Board or its Compensation Committee may from time to time select another committee or persons to be responsible as Plan Administrator for any Plan transactions not subject to Rule 16b-3, which Plan Administrator shall be subject to the overall supervision of the Compensation Committee or the Board, as applicable. Unless otherwise specified herein, the Plan Administrator shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Plan Administrator, including the power to delegate to a Committee or other persons any of the administrative powers the Plan Administrator is authorized to exercise (and except as otherwise specifically provided herein, all references to the Board in this Plan or in any Offering Document shall thereafter be deemed references to the Plan Administrator or its designee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board retains

the authority to concurrently administer the Plan with the Plan Administrator and may, at any time, revest in the Board some or all of the powers previously delegated to the Plan Administrator.

B. The Board may administer, interpret and amend the Plan in any manner it believes to be desirable (including amendments to outstanding Purchase Rights and the designation of a brokerage firm at which accounts for the holding of shares purchased under the Plan must be established by each Eligible Employee desiring to participate in the Plan), and any such interpretation shall be final and binding on all parties who have an interest in the Plan.

C. Any Plan Administrator that is not a Committee may not, without the approval of the Board, or without stockholder approval to the extent required under Section X: (i) increase the number of shares

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issuable under the Plan, except that the Plan Administrator shall have the authority, exercisable without such approval, to effect adjustments to the extent necessary to reflect changes in the Company s capital structure pursuant to Section VI.B; (ii) alter the purchase price formula so as to reduce the purchase price payable for the shares issuable under the Plan; or (iii) materially increase the benefits accruing to Participants under the Plan or materially modify the requirements for eligibility to participate in the Plan.

IV. OFFERINGS

A. The Board may from time to time grant Purchase Rights to purchase shares of Common Stock under the Plan to Eligible Employees in an Offering (consisting of one or more Periods of Participation) on an Offering Date or Offering Dates selected by the Board and as specified in an Offering Document. Each Offering Document shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate, which shall comply with the terms of the Plan, and which shall designate the Participating Companies for such Offering. Unless otherwise specifically provided in the Offering Document, with respect to each Offering in effect under the Offering Document each Participating Company shall be considered for purposes of the Plan to have its own separate Offering for the Eligible Employees employed by such Participating Company, so that no two Participating Companies shall participate in the same Offering.

B. The terms and conditions of an Offering shall be set forth in an Offering Document that is incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings under the Plan need not be identical, but each Offering Document shall include (through incorporation of the provisions of this Plan by reference in the Offering Document) the Offering Period, which period shall not exceed twenty-seven (27) months beginning with the Offering Date, and the substance of the provisions contained in Sections IV through VII, inclusive.

C. If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in agreements or notices delivered hereunder: (i) each agreement or notice delivered by that Participant shall be deemed to apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) shall be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) shall be exercised.

D. The Board shall have the discretion to structure an Offering so that if the Fair Market Value of the shares of Common Stock on the first day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of the shares of Common Stock on the Offering Date, then (i) that Offering shall terminate immediately, and (ii) the Participants in such terminated Offering shall be automatically enrolled in a new Offering beginning on the first day of such new Purchase Period.

V. ELIGIBILITY

A. Purchase Rights may be granted only to employees of the Company or, as the Board may designate, to employees of a Corporate Affiliate. Except as provided in Section V.B, an Employee shall not be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee has been in the employ of the Company or a Corporate Affiliate, as the case may be, for such continuous period preceding such Offering Date as the Board may require pursuant to the Offering Document, but in no event shall Offerings intended to qualify under Code Section 423 require that the period of continuous employment be greater than two (2) years. In addition, the Board may provide in the Offering Document that no employee shall be eligible to be granted Purchase Rights under the Plan unless, on the

Offering Date, such employee s customary employment with the Company or the Corporate Affiliate is for more than twenty (20) hours per week (or such lesser number of hours per week as the Board may approve for an Offering) and more than five (5) months per calendar year (or such lesser number of months per calendar year as the Board may approve for the Offering).

B. The Board may provide in an Offering Document that each person who, during the course of an Offering, first becomes an Eligible Employee shall, on a date or dates specified in the Offering Document which coincides with the day on which such person becomes an Eligible Employee or that

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occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right shall thereafter be deemed to be a part of that Offering. Such Purchase Right shall have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted shall be the Offering Date of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right shall begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she shall not receive any Purchase Right under that Offering.

C. No Employee shall be eligible for the grant of any Purchase Rights under the Plan if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any Corporate Affiliate. For purposes of this Section V.C., the rules of Section 424(d) of the Code shall apply in determining the stock ownership of any Employee, and stock that such Employee may purchase under all outstanding Purchase Rights shall be treated as stock owned by such Employee.

D. As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights under the Plan only if such Purchase Rights, together with any other rights granted under all employee stock purchase plans of the Company and any Corporate Affiliates, do not permit such Eligible Employee s rights to purchase stock of the Company or any Corporate Affiliate to accrue at a rate that exceeds twenty five thousand dollars ($25,000) of Fair Market Value of such stock (determined at the time such rights are granted and, with respect to the Plan, as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time. Notwithstanding the foregoing, such limitation shall not apply to Eligible Employees participating in an Offering that is not intended to qualify as a qualified employee stock purchase plan offering under Code Section 423, unless otherwise provided in the Offering Document.

E. Officers of the Company and any designated Corporate Affiliate, if they are otherwise Eligible Employees, shall be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code shall not be eligible to participate.

VI. STOCK SUBJECT TO PLAN

A. The Common Stock purchasable by Participants under the Plan shall, solely in the discretion of the Board, be made available from either authorized but unissued shares of the Common Stock or from shares of Common Stock reacquired by the Company, including shares of Common Stock purchased on the open market. The total number of shares that may be issued under the Plan shall not exceed 50,700,000 shares. If any Purchase Right granted under the Plan shall for any reason terminate without having been exercised, the shares of Common Stock not purchased under such Purchase Right shall again become available for issuance under the Plan.

B. In the event any change is made to the Company s outstanding Common Stock by reason of any stock dividend, stock split, combination of shares or other change affecting such outstanding Common Stock as a class without receipt of consideration, then appropriate adjustments shall be made by the Board to (i) the class and maximum number of

shares issuable over the term of the Plan, (ii) any share limitations in an Offering on the maximum number of shares purchasable under the Offering; and (iii) the class and number of shares and the price per share of the Common Stock subject to each Purchase Right at the time outstanding under the Plan. Such adjustments shall be designed to preclude the dilution or enlargement of rights and benefits under the Plan.

VII. PURCHASE RIGHTS; PURCHASE PRICE

A. *Maximum Payroll Deductions.* The maximum payroll deduction authorized by the Participant for purposes of acquiring shares of Common Stock under the Plan will be designated by the Board in

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the Offering Document for the Offering and may not exceed a maximum of fifteen percent (15%) of the Participant s Earnings (as defined by the Board in such Offering Document) paid to the Participant for payroll periods that are applicable to the Offering Period, as established by the Board for such Offering.

B. *Enrollment Agreement.* An Employee who participates in the Plan for a particular Offering must complete and submit to the Company an enrollment agreement in the form and in accordance with the procedures prescribed by the Board (which may include electronic enrollment). Each such enrollment agreement shall authorize an amount of payroll deductions expressed as a percentage of the submitting Participant s Earnings (as defined in each Offering Document) for payroll periods that are applicable to the Offering Period (not to exceed the maximum percentage specified by the Board in the Offering Document). To the extent provided in the Offering Document, a Participant may thereafter reduce (including to zero) or increase his or her payroll deductions.

C. *Purchase Price.* Common Stock shall be issuable on any Purchase Date at a purchase price equal to 85 percent of the lower of (i) the Fair Market Value per share on the Offering Date or (ii) the Fair Market Value per share on the Purchase Date.

D. *Number of Purchasable Shares.* The number of shares purchasable per Participant on each Purchase Date within an Offering shall be the number of whole shares obtained by dividing the amount collected from the Participant through payroll deductions applicable to the Offering Period (after conversion into U.S. Dollars, if necessary) by the purchase price in effect on the Purchase Date. In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, and (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering. In addition, in connection with each Offering that contains more than one Purchase Date: (i) the Board may specify a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering, and (ii) if the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata allocation of the shares of Common Stock available shall be made in as nearly a uniform manner as shall be practicable and equitable.

E. *Condition to Exercise of Purchase Rights.* No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act of 1933 (as amended) and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date during any Offering the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights of any Offering shall be exercised on such Purchase Date, and the Purchase Date shall be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in such compliance, except that the Purchase Date shall not be delayed more than twelve (12) months and the Purchase Date shall in no event be more than twenty-seven (27) months from the Offering Date for the Offering. If, on the Purchase Date under any Offering, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in such compliance, no Purchase Rights of any outstanding Offering shall be exercised and all contributed payroll deductions that accumulated during the Offering (reduced to the extent, if any, such contributions have been used to acquire shares of Common Stock) shall be distributed to the Participants without interest (unless otherwise required by applicable law). The Company shall seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of Common Stock upon exercise of the Purchase Rights. If, after commercially 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 Purchase Rights unless and until such authority is obtained.

F. *Payment.* Payment for the Common Stock purchased under the Plan shall be effected by means of the Participant s authorized payroll deductions (after conversion into U.S. Dollars, if necessary) accumulated for the Period of Participation. The amounts so collected shall be credited to

the Participant s bookkeeping account under the Plan, but no interest shall be paid on the balance outstanding in such account. The amounts collected from a Participant may be commingled with the general assets of the Company and may be used for general corporate purposes. To the extent specifically provided in the Offering Document, in addition to making contributions by payroll deductions, a Participant may make contributions through the payment by cash or check prior to each Purchase Date of the Offering.

G. *Termination of Purchase Right.* Unless otherwise provided in the Offering Document, the following provisions shall govern the termination of outstanding Purchase Rights in effect under the Offering:

(i) A Participant may, at any time prior to the last five (5) business days of the Period of Participation, terminate his /her outstanding Purchase Right under the Plan by filing the prescribed notification form with the Board. No further payroll deductions shall be collected from the Participant with respect to the terminated Purchase Right, and any payroll deductions collected for the Period of Participation in which such termination occurs shall be refunded without interest (unless otherwise required by applicable law).

(ii) The termination of such Purchase Right shall be irrevocable, and the Participant may not subsequently rejoin the Offering for which such terminated Purchase Right was granted. In order to resume participation in any subsequent Offering, such individual must re-enroll in the Plan.

H. *Stock Purchase.* Shares of Common Stock shall automatically be purchased on behalf of each Participant (other than Participants whose payroll deductions have previously been refunded or set aside for refund in accordance with the Termination of Purchase Right provisions above) on each Purchase Date (after conversion into U.S. Dollars, if necessary). The purchase shall be effected by applying each Participant s payroll deductions accumulated for the Period of Participation ending on such Purchase Date (plus any payments by cash or check to the extent permitted in the Offering Document) to the purchase of whole shares of Common Stock (subject to the limitation on the maximum number of purchasable shares set forth above) at the purchase price in effect on such Purchase Date. Any payroll deductions not applied to such purchase (a) because insufficient to purchase a whole share or (b) by reason of the limitation on the maximum number of shares purchasable by the Participant on such Purchase Date shall be promptly refunded to the Participant without interest (unless otherwise required by applicable law). No fractional shares shall be issued upon the exercise of Purchase Rights.

I. *Rights as Stockholder.* A Participant shall have no stockholder rights with respect to the shares subject to his/her outstanding Purchase Right until the shares are actually purchased on the Participant s behalf in accordance with the applicable provisions of the Plan. No adjustments shall be made for dividends, distributions or other rights for which the record date is prior to the date of such purchase.

J. *Assignability.* No Purchase Right granted under the Plan shall be assignable or transferable by the Participant other than by will or by the laws of descent and distribution following the participant s death, and during the Participant s lifetime the Purchase Right shall be exercisable only by the Participant.

K. *Change in Ownership.* Should the Company or its stockholders enter into an agreement to dispose of all or substantially all of the assets or outstanding capital stock of the Company by means of:

(i) a sale, merger or other reorganization in which the Company will not be the surviving corporation (other than a reorganization effected primarily to change the State in which the Company is incorporated), or

(ii) a reverse merger in which the Company is the surviving corporation but in which more than fifty percent (50%) of the Company s outstanding voting stock is transferred to holders different from those who held the stock immediately

prior to the reverse merger,

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then all outstanding Purchase Rights under the Plan shall automatically be exercised immediately prior to the consummation of such sale, merger, reorganization or reverse merger by applying the accumulated payroll deductions of each Participant (after conversion into U.S. Dollars, if necessary) for the Period of Participation in which the transaction occurs to the purchase of whole shares of Common Stock at eighty-five percent (85%) of the lower of (i) the Fair Market Value per share on the Offering Date for the Offering in which such transaction occurs or (ii) the Fair Market Value per share immediately prior to the consummation of such transaction. However, the applicable share limitations of Section V and any share purchase limitations set forth in the Offering Document shall continue to apply to any such purchase. The Company shall use its best efforts to provide at least ten (10) days advance written notice of the occurrence of any such sale, merger, reorganization or reverse merger, and Participants shall, following the receipt of such notice, have the right to terminate their outstanding Purchase Rights in accordance with the applicable provisions of this Section VII.

VIII. STATUS OF PLAN UNDER FEDERAL TAX LAWS

The Plan is designed to qualify as an employee stock purchase plan under Code Section 423, so that Offerings under the Plan may qualify as qualified employee stock purchase plan offerings under Code Section 423, and all shares reserved for issuance under the Plan may be issued pursuant to the exercise of Purchase Rights that qualify as qualified employee stock purchase rights under Code Section 423. However, the Board may in its sole discretion determine to approve Offerings under the Plan that are not intended to meet the requirements of Code Section 423, including, without limitation, Offerings in which Eligible Employees who are not subject to U.S. tax laws may participate.

IX. AMENDMENT AND TERMINATION

A. The Board may amend, alter, suspend, discontinue, or terminate the Plan at any time, including amendments to outstanding Purchase Rights. Subject to the requirements of Section III, the Plan Administrator may amend the Plan and outstanding Purchase Rights. However, stockholder approval shall be required for any amendment of the Plan that:

(i) increase the number of shares issuable under the Plan, except that the Board shall have the authority, exercisable without such stockholder approval, to effect adjustments to the extent necessary to reflect changes in the Company s capital structure pursuant to Section VI.B;

(ii) alter the purchase price formula so as to reduce the purchase price payable for the shares issuable under the Plan; or

(iii) materially increase the benefits accruing to Participants under the Plan or materially modify the requirements for eligibility to participate in the Plan;

but in each of (i) through (iii) above only to the extent stockholder approval is required by applicable law or listing requirements.

B. The Board may elect to terminate any or all outstanding Purchase Rights at any time. In the event the Plan is terminated, the Board may also elect to terminate outstanding Purchase Rights either immediately or upon completion of the purchase of shares on the next Purchase Date, or may elect to permit Purchase Rights to expire in accordance with their terms (and participation to continue through such expiration dates). If Purchase Rights are terminated prior

to expiration, all funds contributed to the Plan that have not been used to purchase shares shall be returned to the Participants as soon as administratively feasible.

X. GENERAL PROVISIONS

A. The Plan originally became effective on the Original Effective Date. This amended and restated Plan document became effective on the Effective Date.

B. All costs and expenses incurred in the administration of the Plan shall be paid by the Company.

C. Neither the action of the Company in establishing the Plan, nor any action taken under the Plan by the Board, nor any provision of the Plan itself shall be construed so as to grant any person the right to remain in the employ of the Company or any of its Corporate Affiliates for any period of specific duration.

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D. The provisions of the Plan shall be governed by the laws of the State of California without resort to that State s conflict-of-laws rules.

E. If the Board in its discretion so elects, it may retain a brokerage firm, bank, or other financial institution to assist in the purchase of shares, delivery of reports, or other administrative aspects of the Plan. If the Board so elects, each Participant shall (unless prohibited by the laws of the nation of his or her employment or residence) be deemed upon enrollment in the Plan to have authorized the establishment of an account on his or her behalf at such institution. If the Board in its discretion so elects, shares purchased by a Participant under the Plan shall be held in the account in the name in which the share certificate would otherwise be issued pursuant to Section VII until such shares are sold.

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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

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 second light onto Maude Avenue	Turn right at the second light onto Maude Avenue
1030 West Maude Ave. will be the third	1030 West Maude Ave. will be the third
building on your right	building on your right

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