

**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: _____
- (2) Aggregate number of securities to which transaction applies: _____
- (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): _____
- (4) Proposed maximum aggregate value of transaction: _____
- (5) Total fee paid: _____
- ☐ Fee paid previously with preliminary materials.
- ☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount Previously Paid: _____
- (2) Form, Schedule or Registration Statement No.: _____
- (3) Filing Party: _____
- (4) Date Filed: _____



2022

NOTICE OF ANNUAL MEETING AND PROXY STATEMENT

LETTER TO OUR STOCKHOLDERS

Dear Stockholder,

2021 was a momentous year for Synopsys on several fronts. After another year of successfully navigating the global pandemic and the challenges it has brought to our everyday lives, we entered our 35th year in December. From the earliest days of Synopsys, our commitment has been to create an enduring business for our customers, stockholders and employees. Our 2021 accomplishments and the momentum we built heading into 2022 and beyond are a testament to our lasting commitment.

Business & Financial Results

In fiscal 2021, we delivered excellent business results – greater than our original plan, with strength in all product groups and geographies. For the year, we delivered strong earnings per share growth and record cash flow through significant revenue growth and operating margin expansion. We saw notably expanding customer commitments, as evidenced by non-cancellable backlog of \$6.9 billion as of fiscal year end. We also raised our long-term financial objectives as a result of this momentum and the confidence we have in our future.

Innovation

Underlying this customer and business momentum is continuous technology innovation, which is at the core of our DNA. In 2021, not only did we continue to deliver a wave of new products, we also saw substantial and meaningful adoptions of the transformative products that we've introduced over the past several years.

The depth and breadth of our portfolio enable us to help catalyze the new era of “Smart Everything,” which we define as the intelligence and interconnectedness of virtually every electronic device used in our everyday lives – from computing to automobiles, gaming to medical devices, and many more. Such devices require highly complex semiconductor chips, massive amounts of software, and an ever-increasing need for more security. Synopsys is essential to enabling all of these.

Corporate Governance and Corporate Social Responsibility

Equally important is our commitment to corporate governance and Corporate Social Responsibility. To us, that means a focus on ensuring a future that is sustainable, just and secure.

We believe that having a strong, knowledgeable, energized and diverse Board of Directors is critical to helping us drive long-term stockholder value. In our quest for continuous improvement, we've made a number of enhancements in terms of board diversity and oversight. For example, one-third of our Board is now comprised of female directors. Our Board committees continually evolve and update their oversight in critical areas such as human capital management, cybersecurity, data privacy, sustainability and social responsibility as we scale to our next level of ambition. In addition, we have a proactive year-round stockholder engagement program that includes regular communication of investor feedback to our Board of Directors.

In 2021, we made excellent progress on our Corporate Social Responsibility efforts. You can read about these in our third annual CSR Report to be published soon, but let me highlight a few:

- Having just completed our 3rd year of carbon neutrality, we are continuing our efforts to deliver a 25% reduction in our scope 1 and 2 emissions by 2024, further reduce our global data center footprint, and decarbonize our operations through renewable energy procurement.
- We remain committed to the health, safety and well-being of our employees around the world. In response to the ongoing stress of the COVID-19 pandemic, we have provided our employees with a variety of benefits and support initiatives to address the inherent challenges of working remotely during the pandemic.
- As part of our human capital management efforts, we continued to build greater diversity in our teams and talent pipelines, including increasing the number of women in technical positions and enhancing early career hiring.
- We successfully retained our talented workforce due to our dedicated leadership, our culture of integrity, the opportunities we provide to advance careers, our commitment to diversity and inclusion, and our competitive and equitable total rewards, among other things. As measured by frequent employee surveys, our employee engagement scores remain very high.

Our Technology

We focus our technology around three essential pillars.



Silicon Design & Verification

Build high-performance silicon chips, faster



Silicon IP

Integrate more capabilities on SoCs (system on chip), faster



Software Security & Quality

Build secure, high-quality software, faster

Co-CEO Transition

Finally, I'd like to take this opportunity to thank Chi-Foon Chan, whom I've worked with for the past 31 years, including closely the last nine as co-CEO. As we previously announced, Chi-Foon will be transitioning to a new role in the coming months and is not standing for re-election to the Board of Directors. I greatly value his contributions and our partnership over these many years.

Thank you for your continued support and the trust you have placed in our team. We're excited and optimistic about our future and look forward to continuing to share our journey with you.



Dr. Aart de Geus

Chairman of the Board of Directors



NOTICE OF 2022 ANNUAL MEETING OF STOCKHOLDERS



Date and Time

April 12, 2022 (Tuesday)
8:00 AM (Pacific Time)



Location

Online at
www.virtualshareholdermeeting.com/SNPS2022



Who Can Vote

Stockholders as of
February 11, 2022 are
entitled to vote.

Dear Stockholder,

You are cordially invited to attend the 2022 Annual Meeting of Stockholders of Synopsys, Inc. (Synopsys), a Delaware corporation, which will be held virtually via live webcast on April 12, 2022, at 8:00 a.m. Pacific Time (the Annual Meeting). You will be able to attend and participate in the Annual Meeting online, vote your shares electronically, and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/SNPS2022.

Due to the continued public health impact of the novel coronavirus (COVID-19) and to support the health and well-being of our attendees, our Board of Directors has decided to hold a virtual annual meeting via live webcast. You will be able to attend and participate in the Annual Meeting online, vote your shares electronically, and submit your questions during the meeting.

We are holding the meeting for the following purposes, which are more fully described in the attached Proxy Statement.

VOTING ITEMS

Proposals	Board Vote Recommendation	For Further Details
1. To elect eight 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" each director nominee	Page 11
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"	Page 33
3. To approve our Employee Stock Purchase Plan, as amended, in order to, among other items, increase the number of shares available for issuance under the plan by 2,000,000 shares	"FOR"	Page 44
4. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in this Proxy Statement	"FOR"	Page 50
5. To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending October 29, 2022	"FOR"	Page 82
6. To vote on a stockholder proposal that permits stockholder action by written consent, if properly presented at the meeting	"AGAINST"	Page 85

We will also consider any other business that properly comes before the Annual Meeting or any adjournment or postponement thereof. As of the close of business on February 11, 2022, we are not aware of any other matters to be submitted for consideration at the Annual Meeting.

All of our stockholders of record at the close of business on February 11, 2022 are entitled to attend and vote at the Annual Meeting. A list of registered stockholders entitled to vote at the meeting will be available for ten days prior to the meeting. If you want to inspect this list, email our Investor Relations department at synopsys-ir@synopsys.com. The list will also be available during the meeting by following the instructions located at www.virtualshareholdermeeting.com/SNPS2022.

Whether or not you plan to attend the Annual Meeting, we urge you to cast your vote in advance of the Annual Meeting via one of the methods described below and in the attached Proxy Statement. The Proxy Statement contains important information for you to consider when deciding how to vote on the above items. You do not need to attend the Annual Meeting in order to vote. For most items being put to a vote, if you do not provide voting instructions in person (virtually), 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. Please see the section titled "About the Annual Meeting" beginning on page 90 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.

Sincerely yours,

John F. Runkel, Jr.
General Counsel and Corporate Secretary
Mountain View, California
February 23, 2022

HOW TO VOTE



Internet

www.proxyvote.com



Telephone

1-800-690-6903



Mail

Mark, sign, date and promptly mail the enclosed proxy card in the postage-paid envelope

Important Notice Regarding the Internet Availability of Proxy Materials for the Annual Meeting to Be Held on April 12, 2022







The Proxy Statement and our 2021 Annual Report on Form 10-K will be available to stockholders at <http://www.proxyvote.com> on or about February 23, 2022.

TABLE OF CONTENTS

Letter to Our Stockholders	1
Notice of 2022 Annual Meeting of Stockholders	3
Proxy Statement Summary	5
Corporate Governance	11
PROPOSAL 1 – Election of Directors	11
Board of Directors	12
Board of Directors Role and Responsibilities	20
Board of Directors Structure	26
Board of Directors Practices, Policies and Processes	29
Director Compensation	30
PROPOSAL 2 – Approval of Our 2006 Employee Equity Incentive Plan, as Amended	33
Purpose and Background	33
Important Features of the 2006 Employee Plan	34
New Plan Benefits and Historical Grant Information	34
Description of the 2006 Employee Plan	36
PROPOSAL 3 – Approval of Our Employee Stock Purchase Plan, as Amended	44
Purpose and Background	44
Description of the Employee Stock Purchase Plan	45
PROPOSAL 4 – Advisory Vote to Approve Executive Compensation	50
Compensation Discussion and Analysis	50
Compensation Committee Report	70
Compensation Committee Interlocks and Insider Participation	71
Executive Compensation Tables	72
Pay Ratio Disclosure	80
Equity Compensation Plan Information	81
Audit Matters	82
PROPOSAL 5 – Ratification of Selection of Independent Registered Public Accounting Firm	82
Fees and Service of Independent Registered Public Accounting Firm	82
Audit Committee Pre-Approval Policies and Procedures	83
Audit Committee Report	83
Stockholder Proposal	85
PROPOSAL 6 – Shareholder Right to Act by Written Consent	85
Security Ownership of Certain Beneficial Owners and Management	88
Additional Information	90
About the Annual Meeting	90
Stockholder Information	94
Other Matters	95
Appendices	96
Appendix A	96
Appendix B	113

PROXY STATEMENT SUMMARY

This summary highlights certain information in the Proxy Statement, but it does not contain all of the information that you should consider before voting. Please review the entire Proxy Statement and 2021 Annual Report on Form 10-K carefully. The items to be voted on at the Annual Meeting along with our Board of Directors' voting recommendations are listed below.

Proposals	Board Vote Recommendation	For Further Details
1. ELECTION OF DIRECTORS The Board of Directors and the Corporate Governance and Nominating Committee believe that the eight director nominees possess the necessary qualifications and experiences to provide quality advice and counsel to management, effectively oversee key business and strategy matters, and carefully consider the long-term interests of our stockholders.	 "FOR" each director nominee	Page 11
2. APPROVAL OF OUR 2006 EMPLOYEE EQUITY INCENTIVE PLAN, AS AMENDED We are asking for approval of an increase in the number of Synopsys common stock available for issuance under our 2006 Employee Equity Incentive Plan by 3,000,000 shares. We believe equity compensation is a critical tool to attract and retain talent, and the share increase will enable us to continue offering competitive equity compensation to our employees.	 "FOR"	Page 33
3. APPROVAL OF OUR EMPLOYEE STOCK PURCHASE PLAN, AS AMENDED We are asking for approval of an increase in the number of Synopsys common stock available for issuance under our Employee Stock Purchase Plan by 2,000,000 shares. Our Employee Stock Purchase Plan is an important recruitment and retention vehicle, and it helps align employee interests with our stockholders' interests. The increase will allow us to continue providing this benefit to employees.	 "FOR"	Page 44
4. ADVISORY VOTE TO APPROVE EXECUTIVE COMPENSATION We closely align the compensation paid to our named executive officers with achievement of our financial goals. We believe the compensation of our named executive officers motivates and rewards them for work that improves our company performance and increases stockholder value.	 "FOR"	Page 50
5. RATIFICATION OF SELECTION KPMG LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM The Board of Directors and the Audit Committee believe it is in the best interests of Synopsys and our stockholders to retain KPMG LLP as Synopsys' independent registered public accounting firm for fiscal 2022. As a matter of good corporate governance, we are asking stockholders to ratify the Audit Committee's selection of KPMG LLP.	 "FOR"	Page 82
6. STOCKHOLDER PROPOSAL If properly presented at the meeting, stockholders will be asked to vote on a proposal that permits stockholder action by written consent. The Board of Directors unanimously recommends that stockholders vote AGAINST this proposal because it is not in the best interests of Synopsys and our stockholders, and is unnecessary given our strong corporate governance practices and accountability to stockholders, as described in the Proxy Statement.	 "AGAINST"	Page 85

A Note about Our Fiscal Year

Our fiscal year ends on the Saturday nearest to October 31. Fiscal 2021 ended on October 30, 2021. Fiscal 2022 will end on October 29, 2022.

PROPOSAL 1**Election of Directors**✓ Our Board of Directors recommends that you vote **FOR** all nominees.

See page

11

for further information.

Director Nominees

Name and Primary Occupation	Director Since	Committee Membership		
		AC	CC	GC
Aart J. de Geus, 67 Co-Chief Executive Officer and Chairman of the Board of Directors, Synopsys	1986			
Janice D. Chaffin, 67 IND Group President (Retired), Consumer Business Unit, NortonLifeLock Inc. (f.k.a. Symantec Corporation)	2014		M	C
Bruce R. Chizen, 66 IND Senior Adviser and PGO Partner, Permira Advisers LLP Venture Partner, Voyager Capital	2001		M	M
Mercedes Johnson, 67 IND Chief Financial Officer (Retired), Avago Technologies, Inc.	2017	C		
Chrysostomos L. "Max" Nikias, 69 IND Professor of Electrical Engineering and President Emeritus, University of Southern California (USC)	2011		C	
Jeannine P. Sargent, 57 IND Senior Advisor, Breakthrough Energy Ventures Senior Advisor, Generation Investment Management LLP Operating Partner and Sr. Advisor, Katalyst Ventures Management LLC	2020	M		
John G. Schwarz, 71 IND Co-founder and Chairman, Visier, Inc.	2007			M
Roy Vallee, 69 IND Lead Independent Director, Synopsys CEO and Chairman of the Board of Directors (Retired), Avnet, Inc.	2003	M		

AC Audit Committee**CC** Compensation and Organizational Development Committee**GC** Corporate Governance and Nominating CommitteeIND IndependentM MemberC Chairman

PROPOSAL 2**Approval of Our 2006 Employee Equity Incentive Plan, as Amended**

✓ Our Board of Directors recommends that you vote **FOR** the approval of the 2006 Employee Equity Incentive Plan, as amended.

See page

33

for further information.

Purpose

The primary goal of the amendment of our 2006 Employee Equity Incentive Plan (the 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 along with our company.

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.

No discounted stock options or stock appreciation rights.

Repricing and cash-out of underwater options not allowed.

No liberal share recycling.

Seven-year maximum term for equity awards.

Full-value awards deplete share reserve at a higher multiple.

Limitations on dividends and dividend equivalents.

No liberal corporate transaction provisions.

Limit on stock awards granted to any participant.

PROPOSAL 3**Approval of Our Employee Stock Purchase Plan, as Amended**

✓ Our Board of Directors recommends that you vote **FOR** the approval of the Employee Stock Purchase Plan, as amended.

See page

44

for further information.

Purpose

The primary goal of the amendment of our Employee Stock Purchase Plan (the Purchase Plan) is to provide us with a sufficient reserve of common stock so we can continue to offer eligible employees the opportunity to purchase our common stock at a discount. We believe the Purchase Plan is an important employee retention and recruitment vehicle and helps align the interests of employees with those of our stockholders.

Important Features of the Employee Stock Purchase Plan

We also note that the Purchase Plan includes provisions that protect our stockholders' interests and reflect corporate governance best practices, including:

Purchase price is at least 85 percent of fair market value.

Offering periods do not exceed 27 months.

The number of shares allocated to the Purchase Plan is less than 10% of our outstanding shares overall.

PROPOSAL 4

Advisory Vote to Approve Executive Compensation

✓ Our Board of Directors recommends that you vote **FOR** the compensation of our named executive officers as disclosed in this Proxy Statement.

See page

50

for further information.

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. To motivate and reward our named executive officers (NEOs) for work that improves our long-term business performance and increases stockholder value, we have set out the following objectives:

Pay for Performance

Align executive compensation to the success of our business objectives.

Competitiveness

Provide competitive compensation that attracts and retains top-performing executives.

Outperformance

Motivate executives to achieve results that exceed our strategic plan targets.

Stockholder Alignment

Align the interests of executives and stockholders through the managed use of long-term incentives.

Balance

Set performance goals that reward an appropriate balance of near- and long-term results.

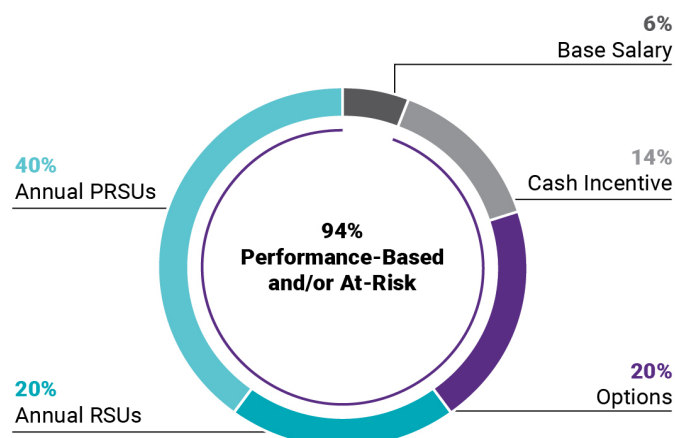
Internal Pay Equity

Promote teamwork among executives by considering internal pay equity in setting compensation levels.

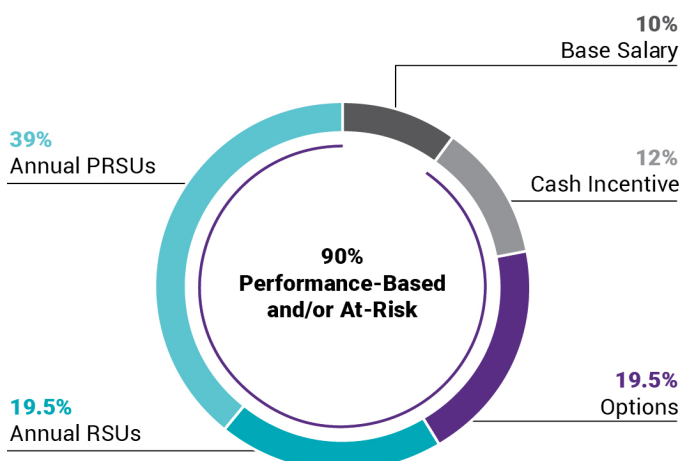
Fiscal 2021 NEO Compensation Details

Our three core elements of NEO direct compensation are base salary, an annual cash incentive opportunity and annual equity awards. The graphic below reflects the approximate general distribution of these three core elements of NEO target total direct compensation (Target TDC) awarded during fiscal 2021 as determined by our Compensation and Organizational Development Committee (the Compensation Committee).

CO-CEOs



OTHER NEOs



Our Compensation Practices

What We Do

- ✓ Substantial Portion of Compensation is Performance-Based and/or At-Risk
- ✓ Balanced Mix of Performance Goals
- ✓ Double Trigger Change of Control Benefits
- ✓ Maximum Payout Caps
- ✓ Clawback Policy Covering Cash and Equity
- ✓ Robust Stock Ownership Guidelines
- ✓ Independent Compensation Committee
- ✓ Independent Compensation Consultant
- ✓ Annual Advisory Say-on-Pay Vote
- ✓ Equity Burn Rate Management

What We Don't Do

- ✗ No Excessive Risks
- ✗ No Excessive Change of Control Payments
- ✗ No Excise Tax Gross Ups
- ✗ No Excessive Perks
- ✗ No Hedging or Pledging of Our Stock
- ✗ No Repricing or Cash-out of Underwater Options and Stock Appreciation Rights
- ✗ No Dividends on Unvested Equity Awards
- ✗ No Executive Pension Plans or SERPs

PROPOSAL 5

Ratification of Selection of Independent Registered Public Accounting Firm

✓ 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 2022.

See page
82
for further information.

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. 30, 2021 (in thousands)	Oct. 31, 2020 (in thousands)
Audit Fees ⁽¹⁾	\$ 5,218	\$ 4,850
Audit-Related Fees ⁽²⁾	—	—
Tax Fees ⁽³⁾	22	14
All Other Fees ⁽⁴⁾	113	13
TOTAL FEES	\$ 5,353	\$ 4,877

⁽¹⁾ Audit fees consist of fees for the audit of Synopsys' consolidated financial statements in our Annual Report on Form 10-K, review of Synopsys' interim condensed consolidated financial statements in each of our Quarterly Reports on Form 10-Q, and services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.

⁽²⁾ Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit or review of Synopsys' consolidated financial statements and not reported under "Audit Fees." There were no audit-related fees in fiscal 2021 or 2020.

⁽³⁾ Tax fees consist of fees for professional services for tax compliance, tax advice and tax planning. This category includes fees primarily related to assistance with international tax compliance services pertaining to certain foreign subsidiaries.

⁽⁴⁾ All other fees consist of fees for a subscription to KPMG research software and additional due diligence services in connection with proposed investments.

PROPOSAL 6

Shareholder Right to Act by Written Consent

✗ Our Board of Directors recommends that you vote **AGAINST** Proposal 6.

See page
85
for further information.

We received a stockholder proposal that asks our Board of Directors to take the steps necessary to permit written consent by stockholders entitled to cast the minimum number of votes that would be necessary to authorize the action at a meeting at which all stockholders entitled to vote thereon were present and voting. For the reasons set forth following the proponent's proposal, our Board of Directors opposes adoption of the proposal and recommends that you vote **AGAINST** the proposal.

CORPORATE GOVERNANCE

PROPOSAL 1

Election of Directors

✓ Our Board of Directors recommends that you vote **FOR** all nominees.

We are asking our stockholders to vote "For" the election of eight 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 nine current directors whose term expires in 2022, eight directors are standing for re-election.

As previously announced, Dr. Chi-Foon Chan will not stand for re-election at the end of his term at the Annual Meeting. Our Board of Directors voted to reduce the size of the Board to eight members immediately following the expiration of Dr. Chan's term at the Annual Meeting. Accordingly, only eight directors are nominated and eligible for election at the Annual Meeting. The Corporate Governance and Nominating Committee of our Board of Directors (the Governance Committee), consisting solely of independent directors as determined by the Board under applicable listing standards of the Nasdaq Global Select Market (Nasdaq Listing Standards), recommended each of our current directors other than Dr. Chan for nomination by our full Board of Directors.

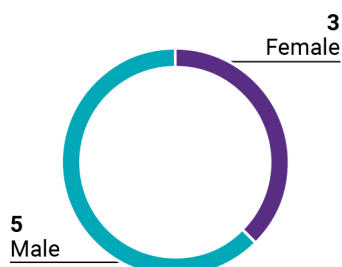
Our Board of Directors has nominated the following directors for election at the Annual Meeting:

✓ Aart J. de Geus	✓ Bruce R. Chizen	✓ Chrysostomos L. "Max" Nikias	✓ John G. Schwarz
✓ Janice D. Chaffin	✓ Mercedes Johnson	✓ Jeannine P. Sargent	✓ Roy Vallee

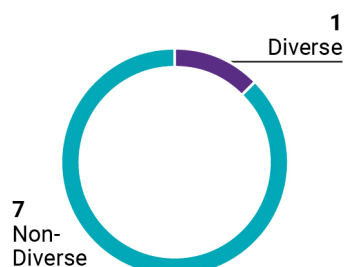
Board of Directors

Board Nominee Snapshot

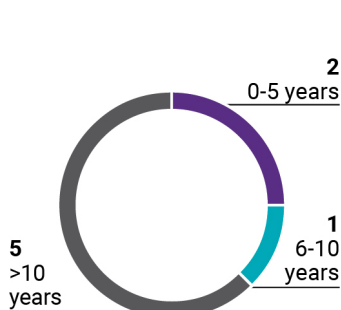
GENDER DIVERSITY



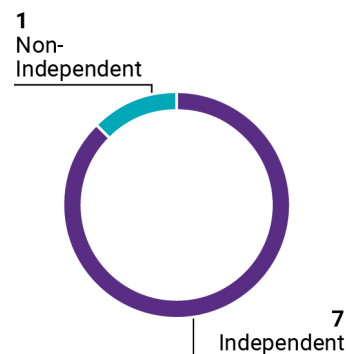
ETHNIC DIVERSITY



TENURE



INDEPENDENCE



Board Diversity Matrix (As of February 23, 2022)

Total Number of Directors	8			
	Female	Male	Non-Binary	Did Not Disclose
Part I: Gender Identity				
Directors	3	5	—	—
Part II: Demographic Background				
African American or Black	—	—	—	—
Alaskan Native or Native American	—	—	—	—
Asian	—	—	—	—
Hispanic or Latinx	1	—	—	—
Native Hawaiian or Pacific Islander	—	—	—	—
White	2	5	—	—
Two or More Races or Ethnicities	—	—	—	—
LGBTQ+	—	—	—	—
Did Not Disclose Demographic Background	—	—	—	—

SKILLS AND EXPERIENCE



Executive Leadership – 8/8



Sales & Marketing – 7/8



Global Expertise – 8/8



Strategy – 6/8



Financial Expert – 6/8



Risk Management – 7/8



Semiconductor Industry Experience – 4/8



Public Company Board – 7/8



Software Industry Experience – 4/8

Our Director Nominees

Information regarding our 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 11, 2022, is set forth below. The section titled “Director Nominations” on page 18 of this Proxy Statement provides additional information on the director nomination process. The nominee descriptions below 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, all nominees are independent as determined by the Board of Directors under applicable federal securities law and the Nasdaq Listing Standards. 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.

AART J. DE GEUS | AGE: 67

DIRECTOR SINCE: 1986

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

Current Public Company Directorships:

- Applied Materials, Inc.

Professional Experience

- Co-founded Synopsys and has served as Chairman of our Board of Directors since February 1998 and Chief Executive Officer since January 1994.
- Has served as co-Chief Executive Officer with Dr. Chi-Foon Chan since May 2012.
- Has held a variety of positions, including President, Senior Vice President of Engineering and Senior Vice President of Marketing, since the inception of Synopsys in December 1986.
- Has served as a director since 1986, and served as Chairman of our Board of Directors from 1986 to 1992 and again from 1998 until present.
- Has also served on the board of directors of Applied Materials, Inc. since July 2007.

Relevant Skills

As a co-founder of Synopsys, Dr. de Geus has led Synopsys for over three decades and is considered a pioneer in the EDA industry. Dr. de Geus brings to our Board of Directors 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.

JANICE D. CHAFFIN | AGE: 67 | INDEPENDENT**DIRECTOR SINCE: 2014**

Synopsis Board Committees:

- Compensation Committee
- Governance Committee (Chair)

Current Public Company Directorships:

- Informatica Corporation
- PTC Inc.

Former Public Company Directorships Held in Last Five Years:

- Electronics for Imaging, Inc.

Professional Experience

- Has served as a member of our Board of Directors since December 2014.
- Held several senior executive positions with NortonLifeLock Inc. (f.k.a. 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.
- Spent more than twenty years with Hewlett-Packard Company in a variety of management and marketing leadership positions before joining NortonLifeLock Inc.
- Has served on the board of directors of PTC Inc. since August 2013 and the board of directors of Informatica Corporation since October 2019.
- Previously served on the board of directors of International Game Technology from September 2010 to April 2015 and on the board of directors of Electronics for Imaging, Inc. from November 2018 to July 2019.

Relevant Skills

Ms. Chaffin has extensive senior management experience with large technology companies. As the former Group President, Consumer Business Unit, of NortonLifeLock Inc., a provider of security, storage and systems management solutions, Ms. Chaffin provides our Board of Directors with demonstrated expertise in strategic marketing and global operations in the software industry, as well as significant experience with cybersecurity matters. Ms. Chaffin also provides our Board of Directors with significant public company board experience, serving as a director of PTC Inc. and Informatica Corporation and previously as a director of Electronics for Imaging, Inc. and International Game Technology.

BRUCE R. CHIZEN | AGE: 66 | INDEPENDENT**DIRECTOR SINCE: 2001**

Synopsis Board Committees:

- Compensation Committee
- Governance Committee

Current Public Company Directorships:

- ChargePoint Holdings, Inc.
- Informatica Corporation
- Oracle Corporation

Professional Experience

- Has served as a member of our Board of Directors since April 2001.
- Currently an independent consultant and has served as Senior Adviser since July 2008 and PGO Partner since June 2018 to Permira Advisers LLP, and Venture Partner with Voyager Capital since July 2009.
- 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 November 2007 to November 2008.
- Served as Adobe's Chief Executive Officer from December 2000 to November 2007 and served as its President from April 2000 to January 2005.
- Previously held various other positions at Adobe dating back to 1994.
- Served on the board of directors of Adobe from December 2000 to April 2008.
- Has served on the board of directors of Oracle Corporation since July 2008, board of directors of ChargePoint Holdings, Inc. since November 2014, and board of directors of Informatica Corporation since August 2015.

Relevant Skills

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 of Directors with executive-level insight into the challenges associated with operating a multi-billion dollar company in a high technology industry. 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 of Directors.

MERCEDES JOHNSON | AGE: 67 INDEPENDENT**DIRECTOR SINCE: 2017**

Synopsis Board Committees:

- Audit Committee (Chair)

Current Public Company Directorships:

- Analog Devices, Inc.
- Millicom International Cellular S.A.
- Teradyne, Inc.

Former Public Company Directorships Held in Last Five Years:

- Intersil Corporation
- Juniper Networks, Inc.
- Maxim Integrated Products, Inc.
- Micron Technology, Inc.

Professional Experience

- Has served as a member of our Board of Directors since February 2017.
- 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.
- 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 Maxim Integrated Products, Inc.
- Has served on the boards of directors of Teradyne, Inc., since July 2014, Millicom International Cellular S.A. since May 2019, and Analog Devices, Inc. since August 2021.

Relevant Skills

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 brings significant information technology and semiconductor experience, which she gained through various leadership positions at Avago Technologies, Inc., Lam Research Corporation and Applied Materials, Inc.

CHRYSOSTOMOS L. "MAX" NIKIAS | AGE: 69 INDEPENDENT**DIRECTOR SINCE: 2011**

Synopsis Board Committees:

- Compensation Committee (Chair)

Professional Experience

- Has served as a member of our Board of Directors since July 2011.
- Served as President of the University of Southern California (USC) from August 2010 to August 2018.
- Currently serves as President Emeritus and Professor of Electrical Engineering, a Director of the USC Institute for Technology Enabled Higher-Education, and is the holder of the Malcolm R. Currie Chair in Technology and the Humanities.
- Served as USC's provost from 2005 through 2010 and as dean of USC's Viterbi School of Engineering from 2001 through 2005.
- Was the founding director of the National Science Foundation-funded Integrated Media Systems Center from 1996 through 2001.
- Has worked as a consultant for numerous corporations and the U.S. government, including the U.S. Department of Defense.
- Is a member of the National Academy of Engineering, a fellow of the American Academy of Arts & Sciences, a life fellow of the Institute of Electrical and Electronics Engineers (IEEE), a fellow of the American Association for the Advancement of Science (AAAS), a foreign member of the Russian Academy of Sciences, and a charter fellow of the National Academy of Inventors.
- Has received the IEEE Simon Ramo medal for exceptional achievement in systems engineering, the Ellis Island Medal of Honor, UNICEF's Spirit of Compassion Award, and six honorary degrees.

Relevant Skills

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 of Directors with broad engineering knowledge.

JEANNINE P. SARGENT | AGE: 57 | INDEPENDENT**DIRECTOR SINCE: 2020**

Synopsis Board Committees:

- Audit Committee

Current Public Company Directorships:

- Fortive Corporation
- Proterra Inc.
- Queen's Gambit Growth Capital

Former Public Company Directorships Held in Last Five Years:

- Cypress Semiconductor Corporation

Professional Experience

- Has served as a member of our Board of Directors since August 2020.
- Has served as a Senior Advisor at Generation Investment Management LLP, an investment firm focused on sustainable companies, since November 2017.
- Held multiple leadership roles at Flex Ltd., a leading contract design, engineering and manufacturing company, including President of Innovation and New Ventures and President of Flex's Energy business, from January 2012 to October 2017.
- Previously served as Chief Executive Officer at both Oerlikon Solar AG, a thin-film silicon solar photovoltaic module manufacturer, and Voyan Technology, an embedded systems software provider.
- Has served on the board of directors of Proterra Inc. since October 2018, Fortive Corporation since February 2019 and Queen's Gambit Growth Capital since January 2021, and served as a member of the board of directors of Cypress Semiconductor Corporation from December 2017 until its acquisition by Infineon Technologies AG in April 2020.

Relevant Skills

Ms. Sargent has over 30 years of experience encompassing leadership, operations, marketing and engineering roles with a diverse mix of high technology hardware and software companies across various industries. Ms. Sargent has significant experience with the development and global launch of disruptive technology, executing investment and acquisition strategies, corporate governance,

JOHN G. SCHWARZ | AGE: 71 | INDEPENDENT**DIRECTOR SINCE: 2007**

Synopsis Board Committees:

- Governance Committee

Current Public Company Directorships:

- Avast PLC
- Teradata Corporation

Professional Experience

- Has served as a member of our Board of Directors since May 2007.
- Currently the Chairman of Visier, Inc, a business analytics cloud-based software firm, and served as its co-founder and Chief Executive Officer from May 2010 to May 2020.
- Previously served on the executive board of SAP AG from March 2008 to February 2010.
- 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 served as the Chief Executive Officer of SAP's Business Objects unit through February 2010.
- Served on Business Objects' board of directors from January 2006 until its acquisition in January 2008.
- Has also served as the President and Chief Operating Officer of NortonLifeLock Inc. (f.k.a. Symantec Corporation) and as President and Chief Executive Officer of Reciprocal Inc.
- Previously spent 25 years at IBM Corporation, where he was most recently General Manager of IBM's Industry Solutions Unit.
- Has served as a director at Teradata Corporation since September 2010, a director at Avast PLC since December 2011, and the Chairman of Avast's board of directors since 2014.

Relevant Skills

As the former Chief Executive Officer of Business Objects S.A., Mr. Schwarz led a large international software company and brings to our Board of Directors extensive management expertise and knowledge of the software industry. Furthermore, Mr. Schwarz provides significant cybersecurity experience to our Board through his previous role at NortonLifeLock Inc. and his current roles at Avast PLC and Visier, Inc. Mr. Schwarz understands the complexities of leading a global organization and operating in international markets. Mr. Schwarz also provides our Board of Directors with public company board experience.

ROY VALLEE | AGE: 69 INDEPENDENT**DIRECTOR SINCE: 2003**

Lead Independent Director

Former Public Company Directorships Held in Last Five Years:

Synopsys Board Committees:

- Teradyne, Inc.

- Audit Committee

Professional Experience

- Has served as a member of our Board of Directors since February 2003.
- Served as Executive Chairman of the board of directors of Avnet, Inc., a global semiconductor/electronics products and IT distributor, from July 2011 to November 2012.
- Served as Avnet's Chief Executive Officer and Chairman of the board of directors from July 1998 to June 2011.
- Also previously served as Avnet's Vice Chairman, President, and Chief Operating Officer.
- Has served on the board of directors of Teradyne, Inc. from February 2000 to May 2021.
- 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.

Relevant Skills

Mr. Vallee provides our Board of Directors 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 of Directors and insight into macroeconomic conditions through his previous board role with the Federal Reserve.

Director Nominations

The Governance Committee works to ensure that the Board of Directors is comprised of directors that bring diverse viewpoints and perspectives and exhibit a variety of skills, professional experiences and backgrounds, in order to effectively represent the long-term interests of our stockholders. To achieve this, the Governance Committee works with our Board to determine the appropriate skills, experience, qualifications and attributes that we seek in new board members in light of our business environment and existing Board composition.

Our Board of Directors places great emphasis on diversity and compliance with legal requirements concerning director diversity, and actively considers diversity in the recruitment and nomination of directors. When evaluating a particular candidate for board membership, our Governance Committee and Board consider many factors, including:

- An understanding of the EDA, semiconductor, electronics, software or technology industries;
- Experience in business operations, finance, marketing, strategic planning and other relevant disciplines;
- Professional background such as executive leadership experience and other public company board service;
- Operational expertise in our industry;
- Diversity, including diversity of personal background and professional experience, qualifications and skills as well as gender and ethnic diversity;
- Personal integrity and interpersonal skills, and ability to represent the best interests of all of our stockholders;
- Personality characteristics to ensure a collaborative and cohesive Board of Directors;
- Ability to fully participate in Board activities, including preparation for, attendance at and active participation in meetings; and
- Whether a candidate holds any positions that would conflict with their responsibilities to the Board or the interests of Synopsys.

The Governance Committee and Board of Directors believe that a significant majority of the members of our Board should qualify as independent directors in accordance with our Corporate Governance Guidelines and the Nasdaq Listing Standards. They also deem it appropriate for our Chief Executive Officer to serve on the Board to provide a first-hand perspective on the operations, management and culture of our business. The Governance Committee and Board of Directors 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 (the SEC) to help ensure that our Audit Committee is able to effectively carry out its oversight duties.

DIRECTOR NOMINATION PROCESS

1. IDENTIFY

The Governance Committee considers candidates suggested by current Board members and management, third-party executive search firms, and stockholder nominations.

2. EVALUATE

The Governance Committee evaluates suggested candidates for appropriate experience, qualifications, diverse backgrounds, skills and attributes in light of our business environment, strategic needs and existing Board composition, and against any legal requirements concerning Board composition.

3. RECOMMEND

After completing the evaluation and review, the Governance Committee makes a recommendation to the full Board as to who should be nominated to our Board of Directors.

4. NOMINATE

Our Board of Directors determines and approves the nominees after considering the recommendation, evaluation and review of the Governance Committee.

Board Refreshment & Succession Planning

Our Board of Directors is committed to ongoing board refreshment. The Governance Committee is responsible for identifying and recommending nominees to the Board for membership. Towards that end, the Governance Committee:

- Regularly evaluates director skills mix to determine if there are any material skills that need to be represented on the current Board.
- Evaluates and considers candidates based on their diversity, skills, experience, qualifications, and alignment with our long-term business strategy.
- Oversees succession planning for Board and committee leadership.
- Focuses on board refreshment through an ongoing year-round process, including the annual Board of Directors evaluation.

Director Evaluations

Our Board of Directors believes that, as an aspect of its commitment to sound corporate governance, it is important to regularly assess its functioning and to identify opportunities for improvement. In accordance with our Corporate Governance Guidelines and under the direction of our Governance Committee Chairperson, on an annual basis, each of our directors evaluates the overall Board and the functioning of the Board committees.

ANNUAL DIRECTOR EVALUATION PROCESS

1 Board of Directors Review Questionnaire

As part of the evaluation, each Board member reviews a comprehensive questionnaire soliciting input on topics such as corporate governance issues, Board and committee culture, structure and meeting process, director interactions with each other and with management, management responsiveness, quality and quantity of information provided to the Board of Directors, strategic planning and more.

2 Governance Committee Chair Compiles and Reviews Answers and Other Feedback

The responses to the questionnaires, in addition to other feedback provided by Board members through interviews and other communications, are then reviewed and compiled by our Governance Committee Chairperson in order to determine strengths and areas for improvement.

3 Governance Committee and the Board of Directors Discuss Results for Continued Improvement

Those results are then discussed with the Governance Committee and the Board of Directors, and such results are used to improve Board and committee performance. Matters that require further assessment or additional follow-up are addressed at future Board or committee meetings, as applicable.

In addition, on an annual basis, our Board of Directors assesses the contributions of each director. 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 Tenure

To improve independent oversight of management and ensure a focus on Synopsys' business strategy, the Board of Directors and Governance Committee strive to maintain a long-term balance between the fresh viewpoints and philosophies and diverse skills, experiences, and perspectives brought by newer directors with the institutional knowledge and knowledge continuity, boardroom collegiality, and organizational experience brought by longer-tenured directors.

In the past several years, the Board of Directors has appointed new diverse and highly-qualified directors. To supplement these 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.

While continuing to monitor this aspect, particularly in light of new and evolving regulations concerning director diversity, 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 Synopsys as we continue to compete in existing semiconductor, electronic design and software security industries as well as new and emerging market segments such as mobile, automotive, digital home, Internet of Things (IoT) and cloud computing.

Board of Directors Role and Responsibilities

Overview

The role of our Board of Directors is to oversee our business and operations for the benefit of our stockholders. Our Board strives to propel the success and growth of our business and operations through the selection of qualified management, oversight of our strategic goals, and ongoing monitoring designed to assure that our operations are conducted in a responsible manner.

Response to COVID-19 Pandemic

Along with management, our Board of Directors continues to monitor the COVID-19 pandemic and its impact on the global economic environment, the industries in which we operate and the way that we conduct our business. In response to the quickly changing and high-impact nature of the COVID-19 pandemic, our Board of Directors instituted a number of changes to its normal operations in order to be strategically aligned with management concerning our strategy and operations, including, beginning in early 2020, ongoing informal interim calls with management to review operations, personnel safety and other important matters. These changes assisted our Board in adapting to the changing nature of the global business in a manner that is in the best interests of our stockholders, employees, customers and other stakeholders. Our Board continues to use the tools it previously implemented to monitor the ongoing COVID-19 pandemic and promptly address new issues that potentially affect Synopsys.

Strategy Oversight

Oversight of Synopsys' business strategy and strategic planning is a key responsibility of our Board of Directors. The Board is deeply engaged and involved in Synopsys' long-term strategy, including evaluating key market opportunities and competitive developments. Our Board believes that its oversight strategy is a continuous process and takes a multilayered approach in exercising its duties.



While our Board of Directors and committees oversee strategic planning, management is charged with executing the business strategy. To monitor performance against Synopsys' strategic goals, the Board receives periodic updates, actively engages in discussions with Synopsys' senior leaders and works closely with management to respond to a dynamically changing business environment.

Risk Oversight

Our Board of Directors 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 management. Our Board is directly involved in risk management issues related to significant matters such as our business strategy, major strategic transactions and executive officer succession through its regular communications with management.



Cybersecurity

Information technology and data security, particularly cybersecurity, is a top area of focus for our Board of Directors, which views our diligence in these areas as essential for the success of our company and the broader technology industry in which we operate. Our Board is actively involved in overseeing cybersecurity risk management, both through annual presentations given by management during Board meetings as well as biannual reports from the Governance Committee on its cybersecurity risk oversight activities and cybersecurity preparedness efforts. The Governance Committee, which is comprised of multiple individuals with significant experience in cybersecurity and related matters, meets with members of management to review our information technology and data security policies and practices, and to assess current and projected threats, cybersecurity incidents, and related risks. We have a dedicated Chief Security Officer whose team advises the company on cybersecurity risks and assesses the effectiveness of information technology and data security processes. The Chief Security Officer reports directly to our executive management team and regularly leads discussions about cybersecurity risk management with our Board of Directors.

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

COMMITTEE

PRIMARY AREAS OF RISK OVERSIGHT

AUDIT

- Assess risks related to financial reporting and controls.
- Supervise the work performed by our independent registered public accounting firm and our internal audit function.
- Supervise our anonymous and confidential ethics reporting system, which encourages and allows any employee to submit concerns directly to senior management and the Audit Committee.
- Assess risks relating to our investments, financing activities, taxes, and world-wide insurance programs.
- Review and approval of related person transactions.
- Evaluate enterprise risk issues associated with financial reporting, accounting, auditing and tax matters.

COMPENSATION

- Assess risks related to our cash and equity compensation programs and practices.
- Conduct an annual review of our company-wide compensation arrangements.
- Review and provide feedback on recruitment strategies, diversity and inclusion initiatives and talent development.
- Oversee risks related to organizational development matters, including human capital management.

GOVERNANCE

- Assess risks related to our overall corporate governance, including our governance policies and principles.
- Review and provide feedback on the composition and structure of our Board and committees, including annual evaluation of our Board and committees and periodic review of director and executive officer succession plans.
- Evaluate risks related to information technology security, cybersecurity and data security.
- Oversee risks relating to corporate social responsibility and sustainability performance, including environmental, social and governance matters.

Management Succession Planning

Our Board of Directors believes that effective management of succession planning, particularly for our executive officers, has played an important role in the past successful transitions of executive officers and is important for the continued advancement of Synopsys. Among the responsibilities of the Governance Committee is the review of succession planning for our executive officers and recommending to our Board candidates for successors to such persons. On an annual basis, whomever is serving in the CEO role will make detailed presentations to our Board of Directors on executive officer plans and individual development plans for identified successors. The Governance Committee is responsible for follow-up actions with respect to succession planning, as may be delegated by our Board from time to time.

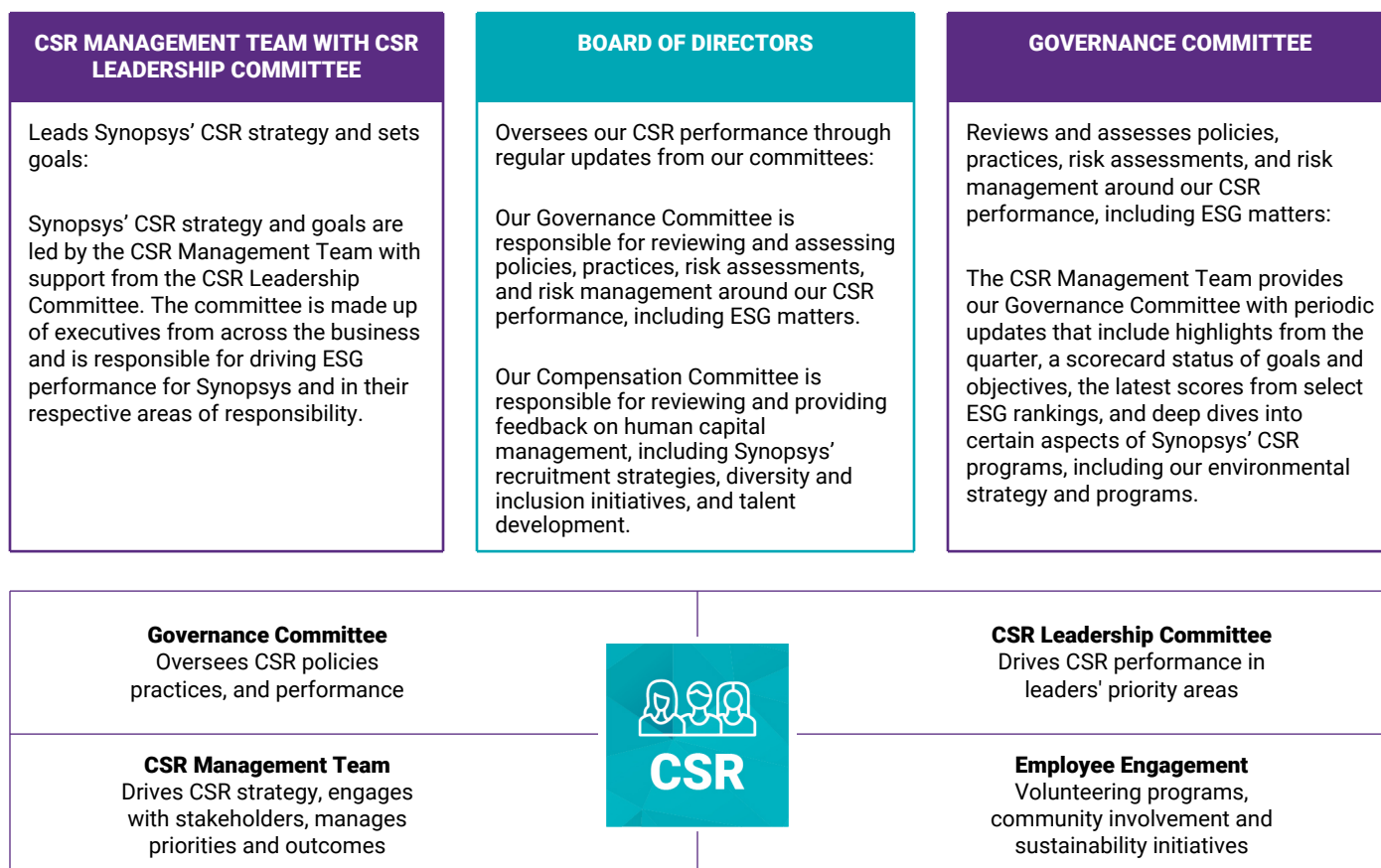
Corporate Social Responsibility¹

Our Corporate Social Responsibility Approach

Shaping the future of Smart Everything means working towards a future that is sustainable, just and secure.

Synopsys' Smart Future Corporate Social Responsibility (CSR) strategy provides a framework for how we manage our own operational impact and influence others around us so that we can conduct our business in a manner that we believe both drives commercial success and contributes to a better world. We are applying our problem-solving approach, people, and resources to influence those around us—including our communities, customers, partners and suppliers—to join us in driving positive change in the world, from enabling low power computing, to bringing safety and security to the driverless car revolution to powering devices that enable human health and well-being.

CSR OVERSIGHT & MANAGEMENT



¹ The contents of our CSR website, available at: www.synopsys.com/company/corporate-social-responsibility.html, including our Corporate Social Responsibility Report, our CDP Climate Change Questionnaire, our Political Activities Policy and the listing of contributions, are referenced for general information only and are not incorporated into this Proxy Statement.

CSR Highlights

In 2021, Synopsys saw improvement in our CSR performance and greater engagement on CSR topics, including in the areas of human capital management, environment, and social impact.



Human Capital Management

Synopsys' talent strategy and programs are designed to support, engage, and optimize our employees' capabilities and experiences throughout their careers. In 2021, we made significant progress across our talent strategies for boosting inclusion and diversity, prioritizing employee well-being, developing great managers, and optimizing our return-to-office planning.

We are committed to attracting and retaining the brightest and best talent across Synopsys, giving us the ability to take on global challenges and create a future that's sustainable, just, and secure. We encourage every member of our global team to lead from where they are, believing everyone makes a difference. We provide various leadership programs to address the career advancement and associated business impact of our employees, emerging leaders, and executives. In 2021, 77% of our employees accessed the Synopsys digital platform for training courses, external articles, videos and blogs.

We care deeply about the diversity of our teams and talent pipelines and the fairness of our pay and development programs, and maintain the goal of ensuring inclusive, equitable practices. We made progress towards our Inclusion and Diversity mission and goals, including the third straight year that hiring of women candidates outpaced women's representation in our total workforce. We formed new relationships with Historically Black Colleges and Universities and the Hispanic Association of Colleges and Universities to promote the hiring of Black, Latinx and Indigenous candidates and created our first four employee resource groups to foster an inclusive and diverse workplace.

As the COVID-19 pandemic entered its second year, we continued to make efforts to protect our people – both their physical safety and their emotional well-being. We prioritized listening to our employees via our semi-annual SHAPE Synopsys surveys. Our most recent SHAPE survey achieved 88% participation from our employees.

Synopsys is committed to supporting, engaging, and optimizing our employees' capabilities and experiences throughout their careers, in a corporate culture defined by our values of integrity, execution excellence, leadership and passion. These values define who we are, what we do and where we're headed. By bringing our individual skills, backgrounds and experiences to the team and pushing the bounds of what's possible, we're building a more resilient, future-focused company together.

A few of our CSR highlights in 2021 are noted below.

DIVERSE REPRESENTATION

In fiscal 2021, the representation of women in our workforce increased to 24%. We also significantly increased the hiring rate of Black, Latinx, and Indigenous talent in the U.S.

EMPLOYEE ENGAGEMENT

In our mid-year 2021 SHAPE survey, 88% of respondents agreed that their team values diverse perspectives, 88% feel comfortable being themselves at work, and 80% feel a sense of belonging at Synopsys.

INCLUSION & DIVERSITY

This year, we formalized our first four employee resource groups: WIN (Women's Impact Network), VIBE (Very Inclusive Black Employees), La Comunidad (Latinx), and PRIDE (LGBTQIA+).

TRAINING & DEVELOPMENT

Through our digital learning platform, 77% of employees accessed training, external articles, videos, and blogs. Through virtual course offerings, 83% of managers graduated from our Inclusive Leader training.



Environment

Our environmental strategy is two-pronged: operating in a way that supports a sustainable future and partnering across our business ecosystem to drive positive change. In 2020, we made a pledge to reduce our Scope 1 and Scope 2 greenhouse gas emissions by 25% by 2024, as compared with our 2018 baseline. In 2021, we announced our participation in a virtual power purchase agreement, which will enable us to mitigate approximately 70% of projected North American emissions starting later this year. 2021 also marked Synopsys' third consecutive year of CarbonNeutral® company certification. We're also building sustainability into the design and operation of our facilities. Additional detail regarding our environmental efforts is included in our Corporate Social Responsibility Report, in our CDP Climate Change Questionnaire, and on our website.

Our technology is at the heart of our efforts to support partner and customer sustainability goals. With the establishment of our cross-functional Low Power Task Force, Synopsys offers a software-driven low power platform of products and solutions that enable our customers to achieve an additional 25% power reduction for the systems-on-a-chip that they design. Through this innovative platform, we're equipping semiconductor manufacturers and the broader electronics industry with the tools to build products that are not only better and faster, but more sustainable.



Social Impact

As a global leader in bringing smart technology to life, Synopsys is well positioned to support the communities in which we operate and help deliver real, meaningful change. Our Synopsys for Good program is how we show up in the world and take action in and for the community. As part of our Smart Future strategy, we act as a catalyst for local and global change through our commitments to education, community, and the environment. Synopsys, directly and through the Synopsys Foundation, donated approximately \$3,400,000 to our nonprofit partners around the world in 2021.



Ethics and Business Conduct

As integrity is one of Synopsys' foundational values, acting responsibly and ethically above reproach is fundamental to our company. Our Board of Directors is committed to ethical business practices and, therefore, we have adopted a Code of Ethics and Business Conduct (the Code of Ethics) applicable to all directors, employees and executive officers, including our co-Chief Executive Officers (co-Principal Executive Officers), Chief Financial Officer (Principal Financial Officer) and Chief Accounting Officer (Principal Accounting Officer). The Code of Ethics is available on our website at: www.synopsys.com/company/corporate-governance-ethics/code-of-ethics.html.

From our Board to management, employees and contractors, everyone at Synopsys is required to read, understand and abide by our Code of Ethics, affirming their commitment to act with integrity. Employees are required to complete this commitment at hiring and renew it through mandatory training on integrity topics during our annual Integrity Awareness Month. Depending on their roles and geographic locations, certain employees are assigned more in-depth ethics and compliance training on topics such as anti-corruption, import-export compliance, insider trading, and antitrust.

We encourage our people to report suspected violations of laws, rules, regulations, and company policies by other employees or any of our suppliers, vendors, resellers, or distributors. Our open-door policy means employees are free to raise these issues with any manager at any time, and our Code of Ethics strictly prohibits retaliation against anyone who raises an issue in good faith. Employees can also report suspected violations to our Human Resources, Legal, Internal Audit, or Ethics and Compliance functions, or anonymously to our third party-managed Integrity Helpline.

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 our website.



Political Activities and Contributions

With respect to political activities undertaken on behalf of Synopsys, we are committed to compliance with applicable laws, rules, and regulations including lobbying registration and disclosure laws, ethics rules, the Foreign Corrupt Practices Act, and anti-bribery laws worldwide. In 2021, Synopsys engaged in direct advocacy with government officials on public policies, legislation, and regulations relevant to the company. All lobbying was undertaken in accordance with applicable law and relevant internal procedures and approvals, as stipulated in Synopsys' Political Activities Policy. We also engage with trade and industry associations in the United States and abroad, which may undertake advocacy on behalf of their members.

Synopsys does not contribute to political parties or candidates, nor do we contribute to political action committees. We may contribute periodically to local ballot initiatives in California that are consistent with our quality of life goals. For the purpose of transparency, all contributions are disclosed on our website at: www.synopsys.com/company/corporate-governance-ethics/government-affairs.html.

Stockholder Engagement

Synopsys is committed to regular, proactive engagement with our stockholders, as we believe that understanding our current and potential stockholders' perspectives is important to building long-term value for our stockholders and strengthening our corporate governance.

Our proactive investor outreach program includes engagements with portfolio managers and analysts, as well as Environmental, Social & Governance (ESG) teams. The feedback that we receive is regularly shared with our Board of Directors.

WHAT WE COMMUNICATE

Synopsys' objective is to drive long-term, enduring stockholder value, and our communications with current and potential stockholders reflect this. Key topics include long-term strategy, near-term objectives, technology developments, capital allocation, mergers and acquisition activity, corporate governance, succession planning, talent management, and environment and social issues.

HOW WE COMMUNICATE

- Quarterly earnings communications
- Investor conference presentations
- Frequent meetings with current and potential stockholders and security analysts via roadshows, bus tours, site visits, executive meetings and ongoing responsiveness to investor inquiries
- Regular perception surveys to gauge investor and analyst sentiment
- ESG-related engagement with top stockholders
- Proxy-related discussions

2021 ESG ENGAGEMENT/OUTREACH

- We proactively engaged with all of our top 25 stockholders in 2021, representing nearly 60% of our total shares outstanding.
- Topics included environmental sustainability, human capital management, inclusion and diversity, Board composition, executive compensation, risk management and proxy items.
- Stockholder ESG feedback has translated into enhanced disclosures and more robust goals, the adoption of leading reporting frameworks, and a corresponding improvement in our ESG ratings across multiple agencies.

Board of Directors Structure

Board of Directors Leadership Structure

The Chairman of our Board of Directors is appointed annually by the Board based on the recommendation of the Governance Committee. Our Board believes it is important to have flexibility in selecting our Chairman and board leadership structure. Therefore, our Corporate Governance Guidelines provide that the position of Chairman of the Board of Directors and Chief Executive Officer (or co-Chief Executive Officer, as the case may be) may be held by the same person. In the event that such positions are held by the same person, the Board of Directors will appoint a Lead Independent Director based on the recommendation of the Governance Committee.

Our Board of Directors believes that it is currently in the best interest of Synopsys and its stockholders for Dr. de Geus to serve as both Chairman and co-Chief Executive Officer. Dr. de Geus co-founded Synopsys and has extensive knowledge of the company, 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-Chief Executive Officer provides strong, consistent leadership for Synopsys.

Lead Independent Director

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 of Directors meetings with the Chairman;
- Reviewing and advising on the schedule of regular Board of Directors meetings with the Chairman;
- Serving as chairperson of regular Board of Directors meetings when the Chairman is unavailable;
- Calling executive sessions of the independent directors, and establishing the agenda for, and presiding at, such sessions;
- Providing feedback from executive sessions to management;
- Serving as liaison between the co-CEOs and the independent directors;
- Participating in the annual performance evaluation of the co-CEOs;
- Encouraging dialogue between the independent directors and management; and
- Consulting with stockholders at management's request.

Our Board of Directors believes the role of Lead Independent Director provides an appropriate balance in Synopsys' leadership to the combined role of Chairman and co-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 of Directors qualifies as independent directors in accordance with applicable federal securities laws and the Nasdaq Listing Standards. 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, Chi-Foon Chan, is an independent director. All standing committees of the Board are composed entirely of independent directors, in each case under the Nasdaq Listing Standard's independence definition. The Nasdaq Listing Standard's definition includes a series of objective tests to determine independence, including that the director not be an employee of Synopsys and not have engaged in certain types of business dealings with Synopsys. In addition, the Board of Directors 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 2021 with Analog Devices, Inc.; Avast PLC; Eurofins USA; Fortive Corporation; Informatica Corporation; Manulife Financial Corporation; Maxim Integrated Products, Inc.; Oracle Corporation; PTC Inc.; Teradata Corporation; Teradyne, Inc.; and the University of Southern California. Certain of 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 party transactions requiring disclosure under the applicable rules of the SEC.

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

Executive Sessions

The independent directors meet in executive sessions without management present. These sessions take place prior to or following regularly scheduled Board of Directors meetings. The independent directors met four times in such sessions during fiscal 2021.

Standing Committees of the Board of Directors

During the year, our Board of Directors maintained an Audit Committee, a Compensation and Organizational Development 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-ethics/board-committees.html>.

The following table summarizes the composition of our Board committees as of the date of our 2022 Annual Meeting of Stockholders:

Director	Audit Committee	Compensation Committee	Governance Committee
Aart J. de Geus, Chairman of the Board			
Janice D. Chaffin		•	Chair
Bruce R. Chizen		•	•
Mercedes Johnson⁽¹⁾	Chair		
Chrysostomos L. "Max" Nikias		Chair	
Jeannine P. Sargent⁽¹⁾	•		
John G. Schwarz			•
Roy Vallee, Lead Independent Director⁽¹⁾	•		
Total committee meetings held in fiscal 2021	9	6	7

⁽¹⁾ Our Board of Directors has determined that our current Audit Committee members, Ms. Johnson, Ms. Sargent and Mr. Vallee, each qualify as an "audit committee financial expert" within the meaning of the regulations of the SEC.

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 (Chair), Jeannine P. Sargent and Roy Vallee
Number of fiscal 2021 meetings	Nine
Responsibilities	The Audit Committee acts on behalf of our Board of Directors, 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, and the engagement of our independent registered public accounting firm and evaluation of their performance and independence, as well as compliance with legal and regulatory requirements that pertain to our financial statements, internal controls over financial reporting, and disclosure controls.
Independence	All members of our Audit Committee are considered independent under the applicable requirements of the SEC and the Nasdaq Listing Standards.
Audit Committee financial experts	Our Board of Directors has determined that our current Audit Committee members, Ms. Johnson, Ms. Sargent and Mr. Vallee, each qualify as an "audit committee financial expert" within the meaning of the regulations of the SEC.

COMPENSATION AND ORGANIZATIONAL DEVELOPMENT COMMITTEE

Members	Chrysostomos L. “Max” Nikias (Chair), Janice D. Chaffin and Bruce R. Chizen
Number of fiscal 2021 meetings	Six
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, reviews and provides feedback on recruitment strategies, diversity and inclusion initiatives and talent development and reviews our organizational development activities.
Independence	All members of our Compensation Committee are considered independent under the applicable requirements of the SEC and the Nasdaq Listing Standards. Each member of the Compensation Committee is also a “non-employee director” for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the Exchange Act).

CORPORATE GOVERNANCE AND NOMINATING COMMITTEE

Members	Janice D. Chaffin (Chair), Bruce R. Chizen and John G. Schwarz
Number of fiscal 2021 meetings	Seven
Responsibilities	<p>The Governance Committee identifies and recommends to our Board of Directors candidates for membership on our Board and committees, reviews performance of our directors, oversees corporate governance matters, environmental, social and governance matters and cybersecurity risk matters, and reviews such other matters relating to our management as appropriate. Our Governance Committee also reviews and discusses with management our strategy regarding mergers and acquisitions and strategic investments.</p> <p>Our Governance Committee’s policy regarding consideration of director candidates submitted by stockholders is set forth below under the heading “Stockholder Information.” The Governance Committee recommended the eight nominees for election to our Board of Directors at the Annual Meeting.</p>
Independence	All members of our Governance Committee are considered independent under the applicable requirements of the SEC and the Nasdaq Listing Standards.

Board of Directors Practices, Policies and Processes

Our Commitment to Good Governance Practices

Synopsys has a history of strong corporate governance practices, and our Board of Directors is committed to such practices that promote the best interests of our stockholders, employees, customers and the communities in which we operate. In furtherance of such practices, we amended our Bylaws to adopt a majority voting standard as well as the right for stockholders to call a special meeting in December 2020. We continue to evaluate our governance practices to tailor them to be flexible and to evolve in response to ever-changing business, legal and social environments.

BEST PRACTICES OF THE BOARD OF DIRECTORS	BOARD OF DIRECTORS COMMITTEE PRACTICES	STOCKHOLDER ENGAGEMENT
<ul style="list-style-type: none"> • 88% independent directors • 38% female directors • Strong Lead Independent Director role • Annual director evaluation and director election • Commitment to Corporate Social Responsibility • Majority standard in uncontested elections 	<ul style="list-style-type: none"> • Expansive Board of Directors oversight, including over CSR and ESG matters • Fully independent committees • Annual committee evaluations • All current Audit Committee members meet the Nasdaq Listing Standard of financial sophistication and are audit committee financial experts under the SEC rules 	<ul style="list-style-type: none"> • Proactive investor outreach program • Annual communication with stockholders • Annual advisory vote on Say-on-Pay • Majority voting standard • Right to call special meeting

Board of Directors Meetings and Attendance

Our Board of Directors held five meetings during fiscal 2021. Each director attended greater than 75% of all Board of Directors and applicable committee meetings that were held during his or her period of service as a director in fiscal 2021.

Board of Directors 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. All then-current directors attended the virtual 2021 Annual Meeting of Stockholders.

Corporate Governance Guidelines

Our Board of Directors is committed to sound and effective corporate governance practices. Accordingly, our Board of Directors has adopted Corporate Governance Guidelines, which 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, majority voting standard in uncontested elections, holdover policy, 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-ethics/governance-guidelines.html>.

Transactions with Related Persons

Our Code of Ethics requires that every employee avoid situations where loyalties may be divided between Synopsys' 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 Synopsys' best interests.

Pursuant to its charter, the Audit Committee reviews and approves all related party transactions as such term is used in Accounting Standards Codification (ASC) Topic 850 *Related Party Disclosures*, or as otherwise required to be disclosed in our financial statements or periodic filings with the SEC other than (1) grants of equity awards made by our Board of Directors or any committee thereof or pursuant to an automatic grant plan or (2) payment of compensation authorized by our Board of Directors 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 SEC. 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 2021 until the present, there have been no (and there are no currently proposed) transactions involving an amount in excess of \$120,000 in which Synopsys was (or is to be) a participant and any executive officer, director, five percent beneficial owner of our common stock or member of the immediate family of any of the foregoing persons had (or will have) a direct or indirect material interest, except the compensation arrangements described in this Proxy Statement for our named executive officers and directors.

Director Compensation

Our non-employee directors are compensated for serving on our Board of Directors. We do not pay our employees who serve on our Board any additional compensation for Board membership.

Our Compensation Committee reviews our non-employee director compensation with the assistance of a compensation consultant, Aon Reward Solutions (Radford), that it has determined to be objective and independent. The Compensation Committee reviews such compensation biennially, at a minimum, and recommends adjustments as appropriate.

Our Compensation Committee believes, based in part on market data provided by Radford (including a survey of market practices and trends among our peer group and the software and semiconductor industries generally) and reviewed with our Compensation Committee, that a combination of cash and equity-based awards is the most effective and appropriate way to compensate our non-employee directors. As part of its periodic review process, both the cash and equity-based award elements are benchmarked by the Compensation Committee against our peer group and the aforementioned industries to ensure that the mix and levels are appropriate and competitive with comparable companies and align our directors' interests with those of our stockholders.

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

Fiscal 2021 Compensation

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

Cash

For fiscal 2021, 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 our Lead Independent Director, \$35,000 to the chair of the Audit Committee, \$20,000 for each of the chair of the Compensation Committee and the chair of the Governance Committee, and \$15,000 to the other members of the Audit Committee. The retainers were paid in advance in four equal payments prior to our regularly scheduled quarterly Board meetings.

Equity

For fiscal 2021, non-employee directors were eligible to receive equity awards under the 2017 Non-Employee Directors Equity Incentive Plan (the 2017 Directors Plan). The plan provides for automatic grants of equity awards to non-employee members of our Board of Directors upon their initial appointment or election, and upon their re-election each year. The 2017 Directors Plan contains limits on the equity awards that may be awarded to non-employee directors in any fiscal year.

Initial Awards. For fiscal 2021, 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 of Directors 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 2021, 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 of Directors each year. The annual award in fiscal 2021, which was comprised solely of restricted stock, had a grant date fair market value equal to approximately \$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 through such date. 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 2021 and, as a result, we issued 670 shares of restricted stock to each non-employee director.

The following table sets forth a summary of the compensation paid to our non-employee directors for services in fiscal 2021:

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	Total (\$)
Janice D. Chaffin	\$ 145,000 ⁽³⁾	\$ 174,877	\$ —	\$ 319,877
Bruce R. Chizen	125,000	174,877	—	299,877
Mercedes Johnson	160,000 ⁽⁴⁾	174,877	—	334,877
Chrysostomos L. “Max” Nikias	145,000 ⁽⁵⁾	174,877	—	319,877
Jeannine P. Sargent	140,000 ⁽⁶⁾	174,877	—	314,877
John G. Schwarz	125,000	174,877	—	299,877
Roy Vallee	170,000 ⁽⁷⁾	174,877	—	344,877

⁽¹⁾ These amounts represent the aggregate grant date fair values, computed in accordance with Financial Accounting Standards Board (FASB) ASC Topic 718, Compensation—Stock Compensation, of restricted stock awards issued pursuant to the 2017 Directors Plan. For each non-employee director, the grant date fair value of these awards is calculated using the closing price of our common stock of \$261.01 on the grant date multiplied by the 670 shares granted. 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 12 to the consolidated financial statements contained in our 2021 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 2021, each of our non-employee directors held 670 shares of unvested restricted stock awards.

⁽²⁾ At the end of fiscal 2021, the only non-employee directors who held outstanding option awards were Ms. Johnson (15,000 shares, which are fully vested) and Ms. Sargent (5,998 shares, 2,000 of which are fully vested and 3,998 of which remain subject to vesting).

⁽³⁾ Includes \$20,000 retainer paid to Ms. Chaffin for serving as the Governance Committee chairperson in fiscal 2021.

⁽⁴⁾ Includes \$35,000 retainer paid to Ms. Johnson for serving as the Audit Committee chairperson in fiscal 2021.

⁽⁵⁾ Includes \$20,000 retainer paid to Dr. Nikias for serving as the Compensation Committee chairperson in fiscal 2021.

⁽⁶⁾ Includes \$15,000 retainer paid to Ms. Sargent for serving as an Audit Committee member in fiscal 2021.

⁽⁷⁾ Includes \$15,000 retainer paid to Mr. Vallee for serving as an Audit Committee member and \$30,000 retainer paid to Mr. Vallee for serving as the Lead Independent Director in fiscal 2021.

Fiscal 2022 Compensation

No changes were made to director compensation for fiscal 2022.

Stock Ownership Guidelines

Our Board of Directors has adopted stock ownership guidelines in order to better align the interests of our directors and management with the interests of our stockholders and to promote accountability and long-term decision making. Our Compensation Committee reviews those guidelines periodically in accordance with best practices and has amended such guidelines from time to time, with the most recent amendment occurring in December 2020. Under the current guidelines, non-employee directors are expected to achieve a stock ownership level with a value equal to the lesser of 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 their 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 hold the number of shares set forth below within four years of their appointment and maintain such ownership level so long as they serve in such positions; provided, however, that if the value of any individual's shares drops below the applicable Minimum Value set forth below, such individual will be required to hold the number of shares equal to the Minimum Value.

Covered Person	Share Number(#)	Minimum Value(\$)
Co-Chief Executive Officer	25,000	\$ 4,400,000
Chief Operating Officer	12,500	2,200,000
Chief Accounting Officer	4,000	700,000
All members of Corporate Staff not listed above	6,500	1,100,000

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 the 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 stock ownership guideline amount.

As of February 11, 2022, each non-employee director and named executive officer held the requisite number of shares and was accordingly compliant with our stock ownership guidelines. Please see the subsection titled "Stock Ownership Guidelines" in the "Compensation Discussion and Analysis" section beginning on page 68 below for more information regarding our stock ownership guidelines as they apply to our named executive officers.

PROPOSAL 2

Approval of Our 2006 Employee Equity Incentive Plan, as Amended

✓ Our Board of Directors recommends that you vote **FOR** the approval of the 2006 Employee Equity Incentive Plan, as amended.

We are asking our stockholders to approve our 2006 Employee Equity Incentive Plan, as amended (the 2006 Employee Plan), to increase the number of shares of common stock, par value of \$0.01 per share, available for issuance under the 2006 Employee Plan by 3,000,000 shares, representing approximately 1.96% of our shares of common stock outstanding as of January 29, 2022. 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 in January 2022, subject to stockholder approval. If approved by our stockholders, the 2006 Employee Plan, as amended, will become effective as of the Annual Meeting date.

Approval of the 2006 Employee Plan requires that the holders of a majority of the shares having voting power present in person or represented by proxy and voting on such matter at the Annual Meeting 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.

Purpose and Background

Our 2006 Employee Plan was amended 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 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 to motivate key employees and that it effectively aligns employee compensation with stockholder interests. The 2006 Employee Plan is the only equity plan that allows us to grant discretionary equity compensation to our employees. If the 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 is calculated based on the number of equity awards granted during the fiscal year divided by the number of shares outstanding. Net burn rate is calculated based on the number of equity awards granted during the fiscal year less equity awards cancelled and returned to the plan, 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 (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 within the guidelines published by ISS. Detailed information about equity awards issued in fiscal 2021 as well as other relevant information is set forth below.

We note that the cornerstone of our compensation philosophy is pay for performance, as discussed in the "Compensation Discussion and Analysis" section beginning on page 50. In that regard, approximately half of the value of the target regular annual equity grants to our named executive officers each year is in the form of performance-based RSUs, and approximately one quarter of the value is in the form of stock option grants, which are only valuable if our stock price increases over time in excess of the exercise price. The remaining quarter of the value is in the form of time-based RSU grants, the value of which are directly linked to our stock price appreciation.

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 regrant 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 terminate 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, thereby limiting the potential for unproductive overhang.
- **Fungible share reserve.** The 2006 Employee Plan has a fungible share reserve of 1.70, under which the share reserve is depleted at a higher multiple for restricted stock units, restricted stock, and other "full-value awards", in order to minimize stockholder dilution.
- **Limitations on dividends and dividend equivalents.** As determined by our Board of Directors, dividends and dividend equivalent rights may accrue with respect to awards other than stock options or stock appreciation rights granted under the 2006 Employee Plan, but no dividends or dividend equivalents may be paid out or settled unless and until, and then only to the extent that, the applicable underlying award vests. Further, neither stock options nor stock appreciation rights granted under the 2006 Employee Plan may provide for any dividends or dividend equivalents thereon.
- **No liberal corporate transaction provisions.** No corporation transaction related vesting acceleration and other benefits may occur without an actual corporate transaction occurring.
- **Limit on stock awards.** The 2006 Employee Plan limits the number of shares that may be granted to any one participant during any one fiscal year.
- **Includes best practice performance-based stock award provisions.** The 2006 Employee Plan includes many best practice performance-based stock award provisions.

New Plan Benefits and Historical Grant Information

No awards have been granted or promised with respect to the additional 3,000,000 shares requested and the 2006 Employee Plan does not provide for set benefits or amounts of awards, and we have not approved any awards that are conditioned on stockholder approval of the 2006 Employee Plan. Awards under our 2006 Employee Plan are made at the discretion of our Board of Directors or the Compensation Committee and are therefore not determinable at this time. The following tables set forth detailed information about our historical equity compensation practices.

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

The following table shows, for each of the named executive officers and the various groups indicated, the total number of shares of Synopsys common stock subject to stock awards that have been granted (even if not currently outstanding) under the 2006 Employee Plan since it became effective through January 29, 2022:

Name	Number of Shares(#)
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	3,058,064
Chi-Foon Chan Co-Chief Executive Officer	2,387,966
Sassine Ghazi President and Chief Operating Officer	363,012
Trac Pham Chief Financial Officer	545,941
Joseph W. Logan Chief Revenue Officer	1,202,831
John F. Runkel, Jr. General Counsel and Corporate Secretary	316,323
All current executive officers as a group (6 persons)	7,874,137
All current directors who are not executive officers as a group (7 persons)	—
Each nominee for election as a director	—
Each associate of any executive officers, current directors or director nominees	—
Each other person who received or is to receive 5% of awards	—
All employees, excluding executive officers, as a group (approximately 16,400 persons as of October 30, 2021)	41,682,599

Additional Equity Plan Information

The following table provides certain additional information regarding Synopsys' equity compensation plans, excluding the Purchase Plan:

	As of 1/29/2022
Total Stock Options Outstanding	2,899,204
Total Restricted Stock Unit Awards Outstanding	4,338,709
Total Common Stock Outstanding	153,256,255
Weighted-Average Exercise Price of Stock Options Outstanding	\$132.63
Weighted-Average Remaining Duration of Stock Options Outstanding	3.98 years
Total Shares Available for Grant under the 2006 Employee Plan	12,006,343
Total Shares Available for Grant under the 2017 Directors Plan	384,992
Stock price as of January 29, 2022	\$296.35

For more information regarding Synopsys' equity compensation plans, including the Purchase Plan, please see "Equity Compensation Plan Information."

Information for Burn Rate Calculations

The following table provides detailed information regarding activity under all of our equity plans (except the Purchase Plan) in fiscal 2021.

	Fiscal 2021
Stock Options Granted by Synopsys ⁽¹⁾	352,671
Restricted Stock Units Granted by Synopsys ⁽²⁾	1,901,391
Restricted Stock Awards Granted by Synopsys ⁽³⁾	4,690
Stock Options Cancelled	36,624
Restricted Stock Units Cancelled ⁽⁴⁾	278,338
Restricted Stock Awards Cancelled	—
Weighted-Average Common Stock Outstanding	152,697,571
Common Stock Outstanding at Fiscal Year End	153,062,402

⁽¹⁾ Granted under the 2006 Employee Plan.

⁽²⁾ Granted under the 2006 Employee Plan, and represents the actual number of restricted stock units (both performance-based and time-based) 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 (both performance-based and time-based) cancelled, prior to the reverse application of the fungible share reserve ratio.

For more information regarding shares of Synopsys common stock that may be issued upon the exercise of options, warrants and other rights granted to employees, consultants or members of our Board of Directors under all of our equity compensation plans as of fiscal year end, please see “Equity Compensation Plan Information.”

Description of the 2006 Employee Plan

The 2006 Employee Plan was amended to increase the number of shares in the share reserve by 3,000,000 shares, and no other material changes were made to the 2006 Employee Plan. The key terms and provisions of the 2006 Employee Plan are summarized below. The following summary of the 2006 Employee Plan does not purport to be a complete description of the 2006 Employee Plan and is qualified in its entirety by reference to the complete text of the 2006 Employee Plan, a copy of which is included as Appendix A to this Proxy Statement.

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, equity awards). The 2006 Employee Plan also provides the ability to grant performance equity awards and performance cash awards (together, 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 (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, a committee may consist solely of two or more “outside directors” (as defined in the plan) to the extent that the Board of Directors determines it to be desirable to qualify awards that were granted under the plan prior to April 8, 2019 as “performance-based compensation” within the meaning of Section 162(m) of the Code, and/or solely of two or more “non-employee directors” (as defined in the plan). 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, administration of the 2006 Employee Plan with respect to equity awards to employees other than executive officers, subject to specified limitations and restrictions.

Eligibility

General. As of January 29, 2022, Synopsys had 16,220 eligible employees and 1,948 eligible consultants under the 2006 Employee Plan. Synopsys does not currently expect to grant awards to consultants under the 2006 Employee Plan, but it is permitted to do so under the plan’s terms. Our non-employee directors are not eligible to receive any awards under the 2006 Employee Plan. The requirements for eligibility are further described below, and the basis for participation is being selected by the plan administrator.

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 105,997,248 shares of common stock. Stockholder approval of this Proposal 2 will constitute approval of this maximum limit for incentive stock options.

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

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

Individual Limit. No person may be granted stock options or stock appreciation rights under the 2006 Employee Plan covering more than 1,000,000 shares of common stock during any calendar year. 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 29, 2022, 12,006,343 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, 105,997,248 shares 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 pursuant to restricted stock awards, restricted stock unit awards or other awards (excluding options and stock appreciation rights).

If a stock option or stock appreciation right award expires or otherwise terminates without being fully exercised, if shares subject to a restricted stock award or restricted stock unit award are forfeited to or repurchased by us, or if an equity award is settled in cash, the shares not issued under those awards, or the shares forfeited to or repurchased by us, become available for subsequent issuance under the 2006 Employee Plan. Such returning shares increase the number of shares available for issuance under the 2006 Employee Plan by one share if they were issued pursuant to a stock option or stock appreciation right and, by 1.70 shares if they were issued pursuant to restricted stock awards, restricted stock unit awards or other awards (excluding options and stock appreciation rights).

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

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

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

Terms of Stock Options

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

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

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.

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, 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 (excluding any third-party financial institution) 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 of Directors.

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.

Restrictions on Transfer. Rights to acquire shares of shares of Synopsys common stock will be transferable by the participant only upon such terms and conditions as are set forth in the restricted stock award agreement, so long as the underlying shares remain subject to the terms of the agreement and provided that in no event may any restricted stock award be transferred for consideration to a third-party financial institution.

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 of Directors.

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

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

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

Terms of Stock Appreciation Rights

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

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

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

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

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

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

- the stock appreciation rights agreement by its terms specifically provides otherwise,
- termination is due to the participant's disability, in which case the stock appreciation right may be exercised (to the extent vested at the time of the termination of service) at any time within 12 months of termination,

- the participant dies 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 of Directors 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 have 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. The 2006 Employee Plan includes a list of performance goals that may be used (alone or in combination with each other) for performance-based awards, which may consist of any measures of performance selected by our Board of Directors.

Performance goals may be set on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to internally generated business plans, the performance of one or more comparable companies or the performance of one or more relevant indices. Adjustments may be made in the method of calculating the attainment of performance goals as follows: (i) to exclude restructuring and/or other nonrecurring charges (including but not limited to the effect of tax or legal settlements); (ii) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated net sales and operating earnings; (iii) to exclude the effects of changes to generally accepted accounting standards required by the Financial Accounting Standards Board; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude stock-based compensation expense determined under generally accepted accounting principles; (vi) to exclude any other unusual or infrequently occurring item (including but not limited to various income tax impacts prompted by tax reform legislation adopted in late 2017 (commonly referred to as the Tax Cuts and Jobs Act of 2017), including the income tax related to transition tax, the tax rate change, and tax restructuring; and the tax impact of repatriation); (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 stockholders 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; (xv) to exclude the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes; and (xvi) pursuant to such other objective and non-discretionary adjustments adopted by the Compensation Committee at the time the award is approved.

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 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.

An equity award may be subject to additional acceleration of vesting and exercisability upon or after a change in control as may be provided in the award agreement for such equity award, or as may be provided in any other written agreement between Synopsys or any affiliate and the participant. An equity award may vest as to all or any portion of the shares subject to the equity award (a) immediately upon the occurrence of a change in control, whether or not such equity award is assumed, continued, or substituted by a surviving or acquiring entity in the change in control, or (b) in the event a participant's 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 will occur.

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.

Dividends and Dividend Equivalents

As determined by our Board of Directors, dividends and dividend equivalent rights may accrue with respect to awards granted under the 2006 Employee Plan other than stock options or stock appreciation rights, but no dividends or dividend equivalents will be paid out or settled unless and until, and then only to the extent that, the applicable underlying award vests. Neither stock options nor stock appreciation rights granted under the 2006 Employee Plan may provide for any dividends or dividend equivalents thereon.

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 of Directors 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.

Clawback Policy

Awards granted under the 2006 Employee Plan are also subject to our Compensation Recovery Policy, which allows us to recover or “clawback” cash and equity compensation paid to covered employees under certain circumstances. Pursuant to the policy, we may require a covered employee to return all or a portion of any compensation paid or received after January 1, 2009, if (1) the compensation was based on the achievement of financial results, and the results were the subject of a substantial restatement of our financial statements as filed with the SEC, and (2) less compensation would have been earned by the employee based on the restated financial results. Our Board of Directors has the sole authority to enforce this policy, and it is limited by applicable law. Each of our executive officers is subject to our Compensation Recovery Policy.

Other Policies

Each award granted under the 2006 Employee Plan may be subject to the terms and conditions of any other policy (and any amendments thereto) adopted by Synopsys from time to time, which may include any policy related to the vesting or transfer of awards, provided that in no event will such policy permit that an award be transferred for consideration to a third-party financial institution. Whether any such policy will apply to a particular award may depend, among other things, on when the award was granted, whom the award was granted to, and the type of award.

U.S. Federal Income Tax Information

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

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

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

If a participant holds stock acquired through exercise of an incentive stock option for more than two years from the date on which the stock option was granted and more than one year after the date the stock option was exercised for those shares, any gain or loss on a disposition of those shares (a qualifying disposition) will be a long-term capital gain or loss.

Generally, if the participant disposes of the stock before the expiration of either of those holding periods (a disqualifying disposition), then at the time of disposition the participant will realize taxable ordinary income equal to the lesser of (1) the excess of the stock’s fair market value on the date of exercise over the exercise price, or (2) 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.

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.

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. 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 date 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.

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

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

Income and Employment Taxes to Participant. Amounts taxed as ordinary income from non-statutory stock options, restricted stock awards and restricted stock unit awards are subject to income tax withholding and applicable employment taxes.

Tax Consequences to Synopsys. To the extent the participant recognizes ordinary income in the circumstances described above, we will generally be entitled to a corresponding income tax deduction provided that, among other things, the income meets the test of reasonableness, is an ordinary and necessary business expense, is not an "excess parachute payment" within the meaning of Section 280G of the Code, and is not disallowed by the \$1,000,000 limitation on certain executive compensation under Section 162(m) of the Code. However, we will not be entitled to any income tax deduction upon a qualifying disposition of an incentive stock option.

While the Compensation Committee considers the deductibility of compensation as one factor in determining executive compensation, the Compensation Committee retains the discretion to award compensation that is not deductible as it believes that it is in the best interests of our stockholders to maintain flexibility in our approach to executive compensation in order to structure a program that we consider to be the most effective in attracting, motivating and retaining key executives.

PROPOSAL 3

Approval of Our Employee Stock Purchase Plan, as Amended

✓ Our Board of Directors recommends that you vote **FOR** the approval of the Employee Stock Purchase Plan, as amended.

We are asking our stockholders to approve our Employee Stock Purchase Plan, as amended (the Purchase Plan) to increase the number of shares of common stock, par value of \$0.01 per share, available for issuance under the Purchase Plan by 2,000,000 shares, representing approximately 1.31% of our shares of common stock outstanding as of January 29, 2022. 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. Stockholder approval of the Purchase Plan is also being sought for the purpose of qualifying certain shares of common stock issued under the Purchase Plan for special tax treatment under Section 423 of the Code (Section 423).

Our Board of Directors approved the Purchase Plan in January 2022, subject to stockholder approval. The Purchase Plan is effective as of such date, subject to stockholder approval on or before the 12-month anniversary of the effective date. If the Purchase Plan is not approved by stockholders by such 12-month anniversary date, then it will cease to be effective, and the Purchase Plan as in effect prior to such amendment will continue in effect in accordance with its terms.

Approval of the Purchase Plan requires that the holders of a majority of the shares having voting power present in person or represented by proxy and voting on such matter at the Annual Meeting vote "For" this Proposal 3. Abstentions and broker non-votes will not be counted as either votes cast "For" or "Against" Proposal 3 and have no effect on the vote for this Proposal 3.

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. 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, 2021, there were 12,616 employees participating in the Purchase Plan, representing approximately 80% of our employees who are eligible to participate in the Purchase Plan.

As of January 29, 2022, an aggregate of 12,805,729 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 2,000,000 shares. The number of employees eligible to participate in the Purchase Plan has increased by 3,549 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.

Description of the Employee Stock Purchase Plan

The Purchase Plan was amended to increase the number of shares in the share reserve by 2,000,000 shares, and no other material changes were made to the Purchase Plan. The key terms and provisions of the Purchase Plan are summarized below. This summary does not purport to be a complete description of the Purchase Plan and is qualified in its entirety by reference to the complete text of the Purchase Plan, a copy of which is included as Appendix B to this Proxy Statement.

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. The day-to-day administrative functions of the Purchase Plan have been delegated to our Shareholder Services Department.

We may, from time to time, consistent with the Purchase Plan and the requirements of Section 423, establish, change or terminate such rules, guidelines, policies, procedures, limitations, or adjustments as deemed advisable by Synopsys, in its discretion, for the proper administration of the Purchase Plan, including but not limited to (1) a minimum payroll deduction amount required for participation in an offering, (2) a limitation on the frequency or number of changes permitted in the rate of payroll deduction during an offering, (3) an exchange ratio applicable to amounts withheld or paid in a currency other than United States dollars, (4) a payroll deduction greater than or less than the amount designated by a participant in order to adjust for Synopsys' delay or mistake in processing an enrollment agreement or in otherwise effecting a participant's election under the Purchase Plan or as advisable to comply with the requirements of Section 423, and (5) determination of the date and manner by which the fair market value of a share of our common stock is determined for purposes of administration of the Purchase Plan. All such actions by Synopsys will be taken consistent with the requirements under Section 423 that all participants granted purchase rights under an offering will have the same rights and privileges within the meaning of such section, except as otherwise permitted by the Purchase Plan and under Section 423.

Our Board of Directors will have the power, in its discretion, to adopt one or more sub-plans of the Purchase Plan as the Board deems necessary or desirable to comply with the laws or regulations, tax policy, accounting principles or custom of foreign jurisdictions applicable to employees of a subsidiary business entity of Synopsys, provided that any such sub-plan will not be within the scope of an "employee stock purchase plan" within the meaning of Section 423. Any of the provisions of any such sub-plan may supersede the provisions of the Purchase Plan, other than the aggregate share limit under the Purchase Plan. Except as superseded by the provisions of a sub-plan, the provisions of the Purchase Plan will govern such sub-plan. Alternatively and in order to comply with the laws of a foreign jurisdiction, our Board of Directors will have the power, in its discretion, to grant purchase rights in an offering to citizens or residents of a non-U.S. jurisdiction (without regard to whether they are also citizens of the United States or resident aliens) that provide terms which are less favorable than or different from the terms of purchase rights granted under the same offering to employees resident in the United States.

Share Reserve

The total number of shares of common stock currently reserved for issuance over the term of the Purchase Plan is 55,700,000. As of January 29, 2022, an aggregate of 42,894,271 shares of common stock have been issued to employees under the Purchase Plan, and 12,805,729 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 57,700,000 shares, all of which may be used pursuant to Section 423 purchase rights. 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 granted under the Purchase Plan 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 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, 2021, Synopsys had approximately 15,695 employees who were eligible to participate in the Purchase Plan. The basis for participation in the Purchase Plan is meeting the eligibility requirements and electing to participate.

Our Board of Directors may provide in an offering that each person who first becomes an eligible employee during the course of an offering will receive a purchase right under the offering on dates specified in the offering that coincide with (or occur after) the day on which such person becomes an eligible employee. Any such purchase right will be deemed to be a part of that offering, and will generally have the same characteristics as any purchase rights originally granted under that offering, subject to certain exceptions as described in the Purchase Plan (including with respect to the purchase price).

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 set forth in the Purchase Plan or that may be set forth in the applicable offering document. 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 generally 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. The plan administrator could, to the extent permitted under the terms of the Purchase Plan, change the purchase periods under the Purchase Plan for purposes of future offerings.

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 further described in the Purchase Plan. As of January 28, 2022 (the last trading day of the first quarter of fiscal 2022), the closing price of our common stock as reported on the Nasdaq Global Select Market was \$296.35 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. To the extent provided in the applicable offering, a participant may thereafter reduce (including to zero) or increase his or her payroll deductions. 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.

Unless otherwise provided in the applicable offering document, a participant may, at any time prior to the last five business days of the purchase period, terminate his or her outstanding purchase right under the Purchase Plan by filing the prescribed notification form with our Board of Directors. In the event of such termination, no further payroll deductions will be collected from the participant with respect to the terminated purchase right, and any payroll deductions collected for the purchase period in which the termination occurs shall be refunded without interest (unless otherwise required by applicable law).

Other Limitations

With respect to rights to acquire shares of common stock for offerings that are intended to qualify under Section 423, the Purchase Plan requires that 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.

The Compensation Committee has set the following limitations on future offerings (which limitations may be modified with respect to future offerings to the extent permitted under the Purchase Plan):

- 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) 15% of a participant's earnings or (2) \$10,000 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). A participant will be deemed to have ceased to be an employee either upon actual termination of employment or upon the corporation employing the participant ceasing to be designated as a participating affiliate.

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 pursuant to adjustments permitted under the Purchase Plan (as 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 (subject to limitations in the Purchase Plan and the applicable offering) 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.

Subject to certain exceptions, 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 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 a pro rata allocation of the available shares of common stock will generally be made 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 or terminations of 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 that (1) increases the number of shares of common stock issuable under the Purchase Plan (other than pursuant to adjustments permitted under the Purchase Plan), (2) alters the purchase price formula so as to reduce the purchase price, (3) materially increases the benefits accruing to participants, or (4) materially modifies 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 aggregate number of shares of common stock purchased under the Purchase Plan, since its adoption through January 29, 2022.

Name	Number of Shares of Common Stock Purchased
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	29,959
Chi-Foon Chan Co-Chief Executive Officer	29,959
Sassine Ghazi President and Chief Operating Officer	15,585
Trac Pham Chief Financial Officer	7,823
Joseph W. Logan Chief Revenue Officer	249
John F. Runkel, Jr. General Counsel and Corporate Secretary	1,937
All executive officers as a group (6 persons)	85,512
All directors who are not executive officers as a group (7 persons) ⁽¹⁾	—
Each nominee for election as a director	—
Each associate of any executive officers, current directors or director nominees	—
Each other person who received or is to receive 5% of awards	—
All employees, excluding executive officers, as a group (approximately 16,400 persons as of October 30, 2021)	42,808,759

⁽¹⁾ Non-employee directors are not eligible to participate in the Purchase Plan.

For more information regarding shares of Synopsys common stock that may be issued upon the exercise of options, warrants and other rights granted to employees, consultants or members of our Board of Directors under all of our equity compensation plans as of fiscal year end, please see “Equity Compensation Plan Information.”

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 city, state or 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.

PROPOSAL 4

Advisory Vote to Approve Executive Compensation

✓ Our Board of Directors recommends that you vote **FOR** the compensation of our named executive officers as disclosed in this Proxy Statement.

As required pursuant to Section 14A of the Securities Exchange Act, we are requesting our stockholders to cast an advisory vote on the compensation of our named executive officers (NEOs) as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the narrative discussion on pages 50 to 81 of this Proxy Statement. Specifically, stockholders are being asked to approve the following resolution at the Annual Meeting:

RESOLVED, that the compensation paid to the named executive officers, as disclosed in this Proxy Statement pursuant to the SEC's executive compensation disclosure rules, which disclosure includes the Compensation Discussion and Analysis, the compensation tables, and the narrative disclosures that accompany the compensation tables, is hereby approved.

This non-binding advisory vote is commonly referred to as a "say-on-pay" vote and is held annually. It is expected that the next say-on-pay vote will occur at the 2023 Annual Meeting of Stockholders.

Compensation Discussion and Analysis

This Compensation Discussion and Analysis discusses the compensation of our NEOs for fiscal 2021.

Fiscal 2021 NEOs

Aart J. de Geus

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

Chi-Foon Chan

Co-Chief Executive Officer and Member of the Board of Directors⁽¹⁾

Sassine Ghazi

President and Chief Operating Officer⁽²⁾

Trac Pham

Chief Financial Officer

Joseph W. Logan

Chief Revenue Officer

John F. Runkel, Jr.

General Counsel and Corporate Secretary

⁽¹⁾ Dr. Chan is not standing for re-election at the 2022 Annual Meeting of Stockholders.

⁽²⁾ Dr. Chan served as President of Synopsys during all of fiscal 2021. Mr. Ghazi was appointed as President of Synopsys effective November 1, 2021.

Executive Summary

Fiscal 2021 Business Performance Overview

Synopsys delivered another record year in fiscal 2021, substantially exceeding our original goals. In addition, disruptive innovations launched over the past several years, combined with strong customer collaborations, have accelerated our momentum, and position us well for continued growth and market success in fiscal 2022 and beyond.

FINANCIAL HIGHLIGHTS

Generated \$4.2 billion in revenue – 14% annual growth.

Non-cancellable backlog grew to \$6.9 billion.

Expanded operating margin substantially and delivered strong earnings per share (EPS) growth.

Excellent business across Semiconductor and System Design segment, with strength across all product groups and geographies.

Returned \$788 million to stockholders through stock repurchases.

Raised our long-term financial objectives – double-digit revenue growth, ongoing margin expansion and non-GAAP EPS growth in the mid-teens range.

BUSINESS HIGHLIGHTS

We have entered a new era of market demand for electronics, the chips and software that go into them, and measures to protect security across many applications. In a highly interconnected world of “smart everything,” the transformational innovations Synopsys has delivered over the past several years are generating increased customer momentum. Simultaneously, we continue to drive ourselves to our own next level of impact as we further scale our internal operations.



New EDA products gaining traction

- *DSO.ai*: Transformational AI-driven design solution that uses machine learning to autonomously speed the design process and generate superior results.
- *Fusion Compiler*: Unparalleled digital design solution continues to drive excellent customer results and business momentum.
- *Hardware verification*: Building on our leading ZeBu emulation and HAPS prototyping systems, introduced next-generation application-specific emulation solutions and the new HAPS-100 prototyping system.
- *Silicon Lifecycle Management Platform*: Delivered key enhancements to this industry-first solution that monitors and analyzes performance, reliability, and security for the entire lifespan of a chip.
- *3DIC Compiler*: Innovative approach enables the design and analysis of multiple die together on a chip.



Semiconductor IP delivering very strong growth

- Another record year with approximately 20% revenue growth to more than \$1 billion, which was driven by our unmatched portfolio of high-value, sophisticated IP in key verticals such as AI, automotive and high-performance computing, serving strong market demand for outsourcing development.



Software Integrity growth accelerates

- Our Software Integrity Group continued to enhance its strategy and operating performance to drive accelerated revenue growth of 10% with strong orders for the year providing substantial momentum for fiscal 2022 and beyond.
- We were named as a leader in the Gartner Magic Quadrant for Application Security Testing for the 5th year in a row, recognizing the completeness of our vision and ability to execute on that vision.

Fiscal 2021 Executive Compensation Overview

The cornerstone of our compensation philosophy continues to be **pay for performance**. We closely align the compensation paid to our NEOs with achievement of our financial goals. Approximately 94% of the target compensation awarded in fiscal 2021 to Dr. de Geus and Dr. Chan, our co-CEOs, was performance-based and/or at risk, and approximately 90% of the target compensation awarded in fiscal 2021 to our other NEOs, as a group, was performance-based and/or at risk.

We performed well against our fiscal 2021 goals, as further described below.

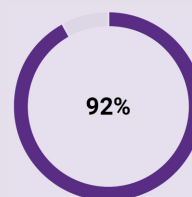
Incentive Awards	Performance Highlights	Commentary
Fiscal 2021 EIP Award	<ul style="list-style-type: none"> 109.8% achievement of Corporate Financial Goals, yielding a 131.9% Corporate Financial Payout Factor 151.1% of achievement of fiscal 2023 revenue backlog goal, which resulted in a Revenue Predictability Payout Factor of 150.0% and funding of 197.9% The weighted average achievement for the Corporate Financial Goals exceeded 100%, resulting in the CFG Multiplier (1.10X) increasing the potential payout for each NEO to 200%, the maximum payout permitted under our plan 	<ul style="list-style-type: none"> Minimum average achievement of 90% of our goals before any payment can be earned Maximum payouts cannot exceed 200.0% on average The actual payout was reduced to 187.6% of target for all NEOs, on average, as a group after considering a number of factors, including internal cost considerations and the desire to compensate other key employees with the amount of the reduction
Fiscal 2021 Annual PRSUs	110.8% achievement of non-GAAP net income performance goal, resulting in 100% of our NEOs' fiscal 2021 Annual PRSUs becoming eligible to vest based on continued service	25% of the PRSUs vested on December 9, 2021, and the remaining 75% are scheduled to vest over a three-year period in equal annual installments
Fiscal 2019 Special PRSUs - 2 nd Tranche	Achievement of non-GAAP operating margin target of 30.0% for fiscal 2021, resulting in the second tranche of our NEOs' Fiscal 2019 Special PRSU Grants vesting	33% of the target PRSUs vested on December 9, 2021. The remaining target PRSUs will vest, if at all, based on non-GAAP operating margin target for fiscal 2022

Fiscal 2022 Executive Compensation Overview

Advisory Vote on Executive Compensation

Our stockholders have the opportunity to cast an annual advisory vote on our NEO compensation. Last year's proxy statement detailed our fiscal 2020 NEO compensation, as well as certain elements of our fiscal 2021 NEO compensation. 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 demonstrate strong support for its decision to maintain a similar compensation philosophy and structure annually.

Approximately 92% of voted shares (cast "for" or "against") approved our NEO compensation as disclosed in last year's proxy statement.



FISCAL 2022 EXECUTIVE COMPENSATION CHANGES

While our institutional stockholders did not express any major concerns with our executive compensation program, our Compensation Committee made certain changes to our executive compensation program to more closely align with Synopsys' business and organizational goals for fiscal 2022. The changes included:



Revising our executive incentive plan for fiscal 2022 to, among other things, update the weighing and goals of the payout factors and to add an organizational goal achievement factor, which will be calculated based on the achievement of certain diversity, retention and succession planning goals. Our existing financial goals, which are intended to drive both short- and long-term performance, consists of revenue, non-GAAP operating margin and revenue backlog, will remain key components of our executive incentive



The Compensation Committee granted annual performance-based restricted stock units (PRSUs) for fiscal 2022 with two-year revenue growth goals and a payout cap based on Synopsys' relative total stockholder return over this same period, which reflects our commitment to long-term performance as well as alignment with our stockholders' interests.

Compensation Practices and Governance Policies

What We Do

- ✓ **Pay for Performance.** Performance-based pay represents a significant portion of our NEOs' Target TDC.
- ✓ **Balanced Mix of Performance Goals.** The performance goals for our incentive awards focus on both near-term and long-term goals.
- ✓ **Double Trigger Change of Control Benefits.** Our NEO change of control agreements are "double trigger."
- ✓ **Maximum Payout Caps.** Our EIP and 2006 Employee Plan maintain maximum payout caps to avoid excessive payments and risk taking.
- ✓ **Clawback Policy.** We maintain a clawback policy for the recovery of performance-based cash and equity compensation in the event of a substantial financial restatement.
- ✓ **Robust Stock Ownership Guidelines.** All of our NEOs are in compliance with our Stock Ownership Guidelines.
- ✓ **Independent Compensation Committee.** Our Compensation Committee is composed solely of independent directors.
- ✓ **Independent Compensation Consultant.** Our Compensation Committee directly retains an independent compensation consultant.
- ✓ **Annual Advisory Say-on-Pay Vote.** We hold an annual advisory say-on-pay vote and ~92% of votes cast approved our fiscal 2020 NEO compensation policies and procedures.
- ✓ **Equity Burn Rate Management.** We continue to closely manage our equity burn rate, limiting gross share usage to 1.5% in fiscal 2021.

What We Don't Do

- ✗ **No Excessive Risks.** Annual risk assessment of executive compensation program to ensure no excessive risk taking.
- ✗ **No Excessive Change of Control Payments.** Cash change of control payments do not exceed two times annual target cash compensation.
- ✗ **No Excise Tax Gross Ups.** We do not provide for "golden parachute" excise tax gross ups.
- ✗ **No Excessive Perks.** We do not provide any excessive perquisites to our NEOs.
- ✗ **No Hedging or Pledging.** All employees, including our NEOs, and our directors are prohibited from engaging in hedging or pledging our stock as collateral for a loan.
- ✗ **No Repricing or Cash-out of Underwater Options.** Our 2006 Employee Plan forbids the repricing and cash-out of underwater options without stockholder approval.
- ✗ **No Dividends on Unvested Equity Awards.** Our 2006 Employee Plan prohibits paying out dividends and dividend equivalents on unvested awards.
- ✗ **No Executive Pension Plans or SERPs.** We only maintain a deferred compensation plan and a standard 401(k) plan.

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. 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

Align executive compensation to the success of our business objectives

Competitiveness

Provide competitive compensation that attracts and retains top-performing executives

Outperformance

Motivate executives to achieve results that exceed our strategic plan targets

Stockholder Alignment

Align the interests of executives and stockholders through the managed use of long-term incentives

Balance

Set performance goals that reward an appropriate balance of near- and long-term results

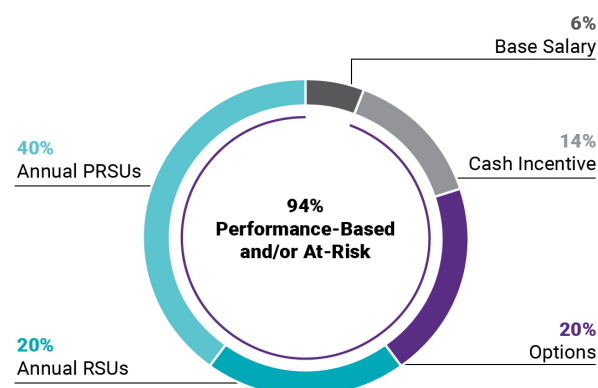
Internal Pay Equity

Promote teamwork among executives by considering internal pay equity in setting compensation levels

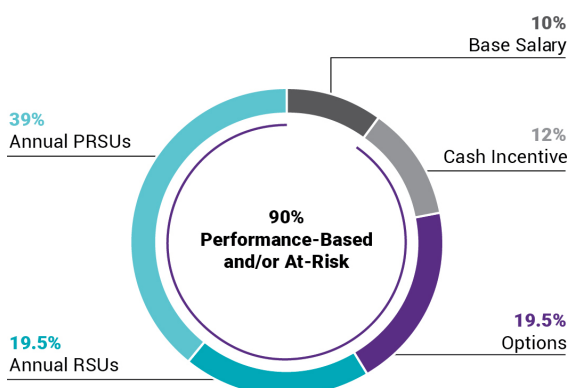
Fiscal 2021 NEO Compensation Details

Our three core elements of NEO direct compensation are base salary, an annual cash incentive opportunity and annual equity awards. The graphic below reflects the approximate general distribution of these three core elements of NEO target total direct compensation (Target TDC) awarded during fiscal 2021 as determined by our Compensation Committee.

CO-CEOs



OTHER NEOs



Core Fiscal 2021 Compensation Element	Purpose	Characteristics
BASE SALARY Co-CEOs 6% Other NEOs 10%	Base salaries compensate our NEOs for expected levels of day-to-day performance.	Base salaries should be determined by each NEO's role and responsibilities, our financial performance projections, pay at comparable companies, our budget for the coming year, historical base salary levels, and the resulting total target compensation that can be earned given the individual's base salary and related target incentive opportunity.
CASH INCENTIVE Co-CEOs 14% Other NEOs 12%	Align NEO performance with near-term financial objectives and future revenue goals, which reward contributions that have a multi-year impact.	Cash incentive payments can be earned by our NEOs only if we achieve a significant level of our financial performance goals, which are aligned to our long-term strategic plan.
STOCK OPTIONS Co-CEOs 20% Other NEOs 19.5%	Align interests of NEOs and stockholders through incentivizing long-term stock price growth and encouraging retention.	Stock options vest over four years subject to continued service with us, with a maximum opportunity over seven years, and they encourage long-term performance as they are only valuable if our stock price increases over time.
ANNUAL RSUs Co-CEOs 20% Other NEOs 19.5%	Align interests of NEOs and stockholders through incentivizing long-term stock price growth and encouraging retention; manage dilution.	Annual RSUs vest over a four-year period, subject to continued service with us, and become more valuable as our stock price increases, which benefits all stockholders.
ANNUAL PRSUs Co-CEOs 40% Other NEOs 39%	Align interests of NEOs and stockholders through incentivizing continued operating performance success and encouraging retention.	Annual PRSUs vest only upon the achievement of pre-established performance criteria and thereafter, are subject to time-based vesting in three equal annual installments, resulting in a total vesting period of four years.

Base Salary

Base salaries compensate our NEOs for expected levels of day-to-day performance and are based on each NEO's role and responsibilities, our financial performance projections, pay at comparable companies, 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. We did not increase the base salary for any of our NEOs except for Mr. Ghazi, whose salary was increased to reflect his promotion to Chief Operating Officer. The base salaries of our NEOs for fiscal 2021 as compared to fiscal 2020 and the primary reasons for any change are summarized below.

NEO	2021 Salary (\$)	2020 Salary (\$)	Salary Increase (\$)	Primary Reasons for the Change
Aart J. de Geus	\$ 540,000	\$ 540,000	\$ —	N/A
Chi-Foon Chan	540,000	540,000	—	N/A
Sassine Ghazi	500,000	430,000	70,000	Move from GM of the Design Group to Chief Operating Officer and associated increase in responsibilities; internal pay equity; market competitiveness; prior performance
Trac Pham	475,000	475,000	—	N/A
Joseph W. Logan	450,000	450,000	—	N/A
John F. Runkel, Jr.	425,000	425,000	—	N/A

Cash Incentive

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, stockholder value. Our Compensation Committee grants cash incentive compensation opportunities under our Executive Incentive Plan (EIP).

Executive Incentive Plan. At the beginning of the fiscal year, the Compensation Committee approves a threshold level of performance or **threshold payment goal** that must be achieved, before there is any payment under the EIP. The Compensation Committee also approves the **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 adjust those payments produced by the formula. For fiscal 2021, in no event could an actual cash incentive payment to any NEO exceed 200% of the NEO's cash incentive target.

Cash Incentive Target. A cash incentive target is the amount of cash incentive compensation that a NEO could earn if we achieve our performance goals. Targets are expressed as a percentage of the NEO's salary. In reviewing targets, our Compensation Committee takes into consideration each NEO's role and responsibilities, our financial performance projections, the budget for the coming year, pay at comparable companies, historical compensation levels and the resulting total target compensation that can be earned given the individual's base salary and related target incentive opportunity. The cash incentive targets for each of our NEOs for fiscal 2021 as compared to fiscal 2020 and the primary reasons for any change are summarized below.

NEO	Fiscal 2021 Cash Incentive Target (% of Salary)	Fiscal 2020 Cash Incentive Target (% of Salary)	Cash Incentive Target Increase (%)	Primary Reasons for the Change
Aart J. de Geus	240%	240%	—%	N/A
Chi-Foon Chan	240	240	—	N/A
Sassine Ghazi	150	130	20	Move from GM of the Design Group to Chief Operating Officer and associated increase in responsibilities; internal pay equity; market competitiveness; prior performance
Trac Pham	100	100	—	N/A
Joseph W. Logan	150	150	—	N/A
John F. Runkel, Jr.	75	75	—	N/A

Threshold Payment Goal. On an annual basis, our Compensation Committee sets a threshold payment goal for the EIP as well as performance goals based on revenue, operating margin, and revenue backlog. If we fail to achieve our payment goal, no cash incentive payments will be earned under the EIP.

Performance Goals. Assuming the threshold payment goal is achieved for fiscal 2021, we still had to achieve at least a 90% weighted-average performance level for our **Corporate Financial Goals**, before any cash incentive payment may be earned.

Our Corporate Financial Goals for fiscal 2021 and the rationale for these goals are summarized in the table below.

Corporate Financial Goals	Rationale
Current fiscal year revenue	Incentivizes revenue growth and rewards efforts to retain customers and expand our business
Current fiscal year non-GAAP operating margin	Ensure appropriate investment to drive growth and support operating effectiveness
Future fiscal years revenue backlog	Incentivizes future revenue growth and revenue predictability

In addition, for fiscal 2021, the Compensation Committee set a further revenue backlog goal called a **Revenue Predictability Goal** that, if fully achieved, could increase the EIP payments through a multiplier. We used revenue backlog capturing two subsequent fiscal years of revenue backlog to encourage our NEOs to address future revenue and revenue predictability, thereby rewarding contributions that have a multi-year impact.

For fiscal 2021, our Compensation Committee believed the consistent application of this blend of performance measures permitted our NEOs to focus on sustained performance rather than short-term accomplishments and would contribute to our consistent revenue growth and profitability achievement.

The Compensation Committee set the numeric goals for each EIP performance metric based on the fiscal 2021 operating plan approved by our Board of Directors.

FISCAL 2021 THRESHOLD PAYMENT GOAL, CORPORATE FINANCIAL GOALS, REVENUE PREDICTABILITY GOAL AND GOAL ACHIEVEMENT

Our fiscal 2021 threshold payment goal was 70.0% of our fiscal 2021 non-GAAP operating margin target⁽¹⁾, as we did not believe that our NEOs should have the right to earn a bonus unless this minimum level of profitability was obtained. We achieved our non-GAAP operating margin target of 30.0% by attaining a non-GAAP operating margin of 30.5% for fiscal 2021 and, therefore, the threshold payment goal was satisfied.

Corporate Financial Goals	Performance Weight		Fiscal 2021 Achieved(%)
Fiscal 2021 Revenue	33.33%	<div> <div></div> <div>\$4.204 billion</div> <div>\$4.074 billion Target</div> </div>	103.2%
Fiscal 2021 non-GAAP operating margin ⁽¹⁾	33.33%	<div> <div></div> <div>30.5%</div> <div>30.0% Target</div> </div>	101.7%
Fiscal 2022 revenue backlog ⁽²⁾	33.34%	<div> <div></div> <div>\$3.336 billion</div> <div>\$2.681 billion Target</div> </div>	124.4%
Average Achievement			109.8%

Revenue Predictability Goal	Fiscal 2021 Target ⁽³⁾	Fiscal 2021 Achieved(%)
Fiscal 2023 revenue backlog ⁽²⁾	—	151.1%

⁽¹⁾ Non-GAAP operating margin is GAAP operating margin adjusted to exclude (i) the amortization of acquired intangible assets, (ii) the impact of stock compensation, (iii) acquisition-related costs, (iv) restructuring charges, (v) the effects of certain settlements, final judgments and loss contingencies related to legal proceedings, and (vi) 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 with considerable effort by our NEOs and employees, and in the absence of significant deterioration in macroeconomic or broader industry conditions.

We achieved strong financial results in fiscal 2021, with an average achievement of our three Corporate Financial Goals of 109.8%. We also performed well against our Revenue Predictability Goal, achieving 151.1% of our target, which resulted in the application of a multiplier of 150.0% to potential NEO cash incentive payments, as described below.

Corporate Financial Goals 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. For fiscal 2021, we required a minimum average performance achievement of 90% for our Corporate Financial Goals before our NEOs can earn any cash incentive payment.

The EIP was structured in this way to provide a limited payment opportunity when performance goals are narrowly missed. We believe this limited 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 when compared to standard industry practice. For fiscal 2021, our EIP also had a higher performance threshold than our broad-based employee incentive compensation plans to reinforce accountability at the leadership level.

OVERVIEW OF FISCAL 2021 CORPORATE FINANCIAL GOAL PAYOUT MATRIX

Percentage of Average Achievement of Corporate Financial Goals(%)	Corporate Financial Payout Factor ⁽¹⁾ (%)
≥125%	150%
105	120.2
100	100
90	67.5
<90	—

⁽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 109.8%, the Corporate Financial Payout Factor is 131.9% for fiscal 2021.

Revenue Predictability Goal Payout Matrix. For fiscal 2021, our Compensation Committee also approved a matrix that determined the Revenue Predictability Payout Factor that would be applied at each level of achievement of the Revenue Predictability Goal. For fiscal 2021, achievement of 100% or less of the Revenue Predictability Goal would result in no increase to the payout determined by the other metrics established for the cash incentive award. Achievement above that level, however, could result in a Revenue Predictability Payout Factor of up to 150%, based on actual performance.

The Revenue Predictability Factor acted as a “multiplier” for the Corporate Financial Payout Factor and, regardless of the level of achievement of the Revenue Predictability Goal, no payment would be made under the EIP for fiscal 2021 if the minimum 90% average achievement level was not met under the Corporate Financial Goals.

OVERVIEW OF FISCAL 2021 REVENUE PREDICTABILITY GOAL PAYOUT MATRIX

Percentage of Average Achievement of Revenue Predictability Goal(%)	Revenue Predictability Payout Factor ⁽¹⁾ (%)
≥125%	150%
110	150
105	125
100	100
≤90	100

⁽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 between 100% to 110%. Since we achieved 151.1% of our Revenue Predictability Goal, the Revenue Predictability Payout Factor is 150.0% for fiscal 2021 with a straight-line interpolation being applied.

EIP Payment Formula. After the end of fiscal 2021, our Compensation Committee certified whether the threshold payment goal and performance goals were met based on the following formula from the EIP to calculate potential cash incentive payments:

$$\text{Potential Cash Incentive Payment} = \text{Cash Incentive Target} \times \text{Corporate Financial Payout Factor} \times \text{Revenue Predictability Payout Factor (if applicable)} \times \text{Corporate Financial Goals Multiplier (if applicable)}$$

Factor	How It Worked	Objective	Levels for Fiscal 2021
Corporate Financial Payout Factor	We calculated the weighted-average achievement of our three Corporate Financial Goals and matched it with the corresponding Corporate Financial Payout Factor in our Payout Matrix (see above).	Each of the three Corporate Financial Goals was equally weighted to emphasize not only current fiscal year financial goals but also future revenue.	131.9% – due to weighted-average goal achievement of 109.8%.
Revenue Predictability Payout Factor (if applicable)	If we achieved more than 100% of our Revenue Predictability Goal, the EIP would multiply potential cash incentive payments by a Revenue Predictability Payout Factor based on the level of overachievement. Under-performance would not decrease potential payments. For fiscal 2021, the Revenue Predictability Payout Factor ranged from 100% to 150%.	Our Compensation Committee believed this factor encouraged our NEOs to achieve a sustained and predictable future revenue stream.	150.0% – due to achieving 151.1% of our Revenue Predictability Goal.
CFG Multiplier (if applicable)	If the average achievement of our Corporate Financial Goals exceeded 100.0%, a multiplier would be applied to potential cash incentive payments. For fiscal 2021, the potential CFG Multiplier was 1.10.	Our Compensation Committee believed the CFG Multiplier would encourage our NEOs to maximize their efforts to achieve outstanding results for our stockholders.	Applicable – due to average goal achievement of 109.8%, which exceeded 100.0%.

Cap: The maximum individual award for each NEO is capped at 200% of the NEO's target.

The EIP Payment Formula above would not have been applicable, and our NEOs would not have earned any cash incentive payments under the EIP, if the threshold payment goal was not achieved for the fiscal year.

Actual Fiscal 2021 Cash Incentive Payments. Actual cash incentive payments were only earned after our Compensation Committee 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 company and individual performance. The Compensation Committee was empowered to adjust potential cash incentive payments, regardless of whether any multiplier has been earned. In no event can an actual cash incentive payment to a NEO exceed 200% of the NEO's cash incentive target.

Our Compensation Committee convened in late 2021 to discuss the fiscal 2021 performance of each of our NEOs, review potential cash incentive payments, consider other compensation actions taken in fiscal 2021, and determine the actual incentive payments. Based on our achievement of EIP performance goals, the calculation of individual cash incentive using the EIP Payment Formula yielded potential calculated awards of 200% of our NEOs' targets, which was based on:

$$200.0\% \text{ Maximum Potential Cash Incentive Payment (217.7\% without cap)} = \text{Cash Incentive Target} \times 131.9\% \text{ Corporate Financial Payout Factor} \times 150.0\% \text{ Revenue Predictability Payout Factor} \times 1.10 \text{ CFG Multiplier}$$

Per the terms of the EIP, the potential cash incentive payment for each of our NEOs automatically decreased from 217.7% to 200% as described above. After considering a number of factors, including internal cost considerations and the desire to compensate other key employees, the Compensation Committee approved fiscal 2021 actual cash incentive payments under the EIP at 187.6% of target for all NEOs, on average, as a group. The amount of the reduction was then used to compensate other key employees.

The table below shows the amount of the fiscal 2021 EIP awards that were earned, the target cash incentive payments, the cash incentive payments that would have been made based on the formulaic results described above, and the actual cash incentive payments that were made as a result of the Compensation Committee's decisions discussed above.

NEO	Target Cash Incentive Payment(\$)	Calculated Potential Cash Incentive Amount Based on Performance Achievement (Equal to 200% of Target)(\$)	Actual Cash Incentive Payment(\$)	Difference between Potential and Actual Cash Incentive Payment (%)	Primary Reasons for the Change
Aart J. de Geus	\$ 1,296,000	\$ 2,592,000	\$ 2,430,000	-6.3%	In recognition of outstanding individual and company performance, payment amount was established to ensure appropriate reward and internal pay equity for other key employees
Chi-Foon Chan	1,296,000	2,592,000	2,430,000	-6.3	In recognition of outstanding individual and company performance, payment amount was established to ensure appropriate reward and internal pay equity for other key employees
Sassine Ghazi	750,000	1,500,000	1,500,000	—	Market competitiveness; move from GM of the Design Group to COO and associated increase in responsibilities, and individual performance in both roles
Trac Pham	475,000	950,000	890,600	-6.3	In recognition of outstanding individual and company performance, payment amount was established to ensure appropriate reward and internal pay equity for other key employees
Joseph W. Logan	675,000	1,350,000	1,215,000	-10.0	In recognition of outstanding individual and company performance, payment amount was established to ensure appropriate reward and internal pay equity for other key employees
John F. Runkel, Jr.	318,750	637,500	557,800	-12.5	In recognition of outstanding individual and company performance, payment amount was established to ensure appropriate reward and internal pay equity for other key employees

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.

FISCAL 2021 EQUITY AWARDS – ANNUAL EQUITY AWARDS

Our Compensation Committee granted the following annual equity awards in the first quarter of fiscal 2021 to our NEOs under our 2006 Employee Plan:

ANNUAL EQUITY AWARDS



- **Annual performance-based restricted stock units (Annual PRSUs)**, which are eligible to vest only upon the achievement of pre-established performance criteria. Once earned, the award is further subject to time-based vesting in three equal annual installments, resulting in a total vesting period of four years, which helps to hold NEOs accountable for their decision making given that the Annual PRSUs are directly subject to increases and decreases in our stock price, further aligning NEO and stockholder interests.
- **Annual time-based restricted stock units (Annual RSUs)**, which vest in four equal annual installments and contribute to retention. Annual RSUs also promote long-term performance as they are directly subject to increases and decreases in our stock price, further aligning NEO and stockholder interests.
- **Stock options** with time-based vesting, which vest over four years with 25% of the shares vesting on the one-year anniversary of the grant date, and the remaining shares vesting quarterly thereafter. Stock options encourage long-term performance as they are only valuable if our stock price increases over time, as the awards vest.

Previously, we provided a 50/50 mix of Annual PRSUs and stock options. In December 2021, our Compensation Committee determined to grant 50% of each NEO's target annual equity award value in the form of PRSUs, 25% in the form of time-based RSUs and 25% in the form of stock options. The Compensation Committee made this adjustment to better align with market practice and to help manage dilution to existing stockholders, as RSUs result in Synopsys granting fewer shares of common stock than through stock options of equivalent grant date fair value. RSUs also provide an important tool for us to retain and incentivize our highly sought after NEOs. Because the value of the RSUs will be delivered to our NEOs over a four-year period, subject to continued service with us, such RSUs become more valuable if our stock price increases, which benefits both the NEOs and our stockholders.

The Compensation Committee also believes granting Annual PRSUs and stock options is appropriate because PRSUs encourage our NEOs to focus on the achievement of financial metrics that are important measures of our success as well as on long-term value creation, since PRSUs and stock options reward sustained increases in our stock price, though only to the extent the employee vests in the award by remaining in service through the vesting period, and in the case of PRSUs, only to the extent such performance measures are achieved.

NEO	Stock Options(#) ⁽¹⁾	RSU Shares(#) ⁽²⁾	PRSU Shares(#) ⁽³⁾	Grant Date Fair Value of Equity Awards(\$)
Aart J. de Geus	28,987	7,474	14,947	\$ 7,000,335
Chi-Foon Chan	28,987	7,474	14,947	7,000,335
Sassine Ghazi	20,705	5,339	10,677	5,000,473
Trac Pham	14,494	3,737	7,474	3,500,315
Joseph W. Logan	14,494	3,737	7,474	3,500,315
John F. Runkel, Jr.	9,111	2,349	4,698	2,200,247

⁽¹⁾ Stock options vest as to 25% of the shares subject to the option grant on the first anniversary of the grant date and as to 3/48ths of the shares subject to the option grant quarterly thereafter.

⁽²⁾ Annual RSUs vest as to 25% of the shares subject to the award on each anniversary of the grant date.

⁽³⁾ As discussed further under "Annual PRSUs Terms" below, these Annual PRSUs were subject to a non-GAAP net income performance goal of \$972.0 million for fiscal 2021.

Target Value. The size of the annual equity awards granted to each NEO in the first fiscal quarter 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, pay at comparable companies and internal pay equity in determining awards. The Compensation Committee does not have a specific formula that weighs 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 our NEOs and employees in general when approving grants.

The target dollar value was converted into a number of shares based on estimated conditions on the grant date, as described in "Equity Element Allocation" below. The grant date fair value, which is disclosed in the table above and in the subsection titled "Summary Compensation Table" within the "Executive Compensation Tables" section below reflects the accounting value on the grant date. The following table sets forth the initial target value of each NEO's equity grants compared to the last year and the primary reasons for the change.

Initial Target Dollar Value for Annual Equity Grants of all NEOs				
NEO	Fiscal 2021 Approved Target Dollar Value (\$)	Fiscal 2020 Approved Target Dollar Value (\$)	Difference from Fiscal 2020(%)	Primary Reasons for the Change
Aart J. de Geus	\$ 7,000,000	\$ 4,600,000	+52.2%	Market competitiveness (still below median of our peer group); prior performance
Chi-Foon Chan	7,000,000	4,600,000	+52.2	Market competitiveness; prior performance
Sassine Ghazi	5,000,000	2,700,000	+85.2	Move from GM of the Design Group to COO and associated increase in responsibilities; market competitiveness; prior performance
Trac Pham	3,500,000	2,700,000	+29.6	Market competitiveness; prior performance
Joseph W. Logan	3,500,000	2,500,000	+40.0	Market competitiveness; prior performance
John F. Runkel, Jr.	2,200,000	1,550,000	+41.9	Market competitiveness; prior performance

Equity Element Allocation. After choosing the estimated target dollar value for each NEO's annual equity awards, the Compensation Committee sought to allocate approximately 50% of the dollar value to PRSUs and the remaining amount equally between RSUs and stock options.

To determine the target number of PRSUs and RSUs that were granted to the NEOs in December 2020, the Compensation Committee used our closing stock price on the grant date to calculate an award worth approximately 75% of the estimated target dollar value, with approximately 50% allocated towards PRSUs and approximately 25% allocated towards RSUs. 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, RSUs and stock options reflected in the "Summary Compensation Table" below is different, as it is based on our value on the effective grant date.

Annual PRSU Terms. As in past years, the Compensation Committee selected a non-GAAP net income goal for our fiscal 2021 Annual 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 to exclude (i) the amortization of acquired intangible assets, (ii) the impact of stock compensation, (iii) acquisition-related costs, (iv) restructuring charges, (v) the effects of certain settlements, final judgments and loss contingencies related to legal proceedings, and (vi) the income tax effect of non-GAAP pre-tax adjustments.

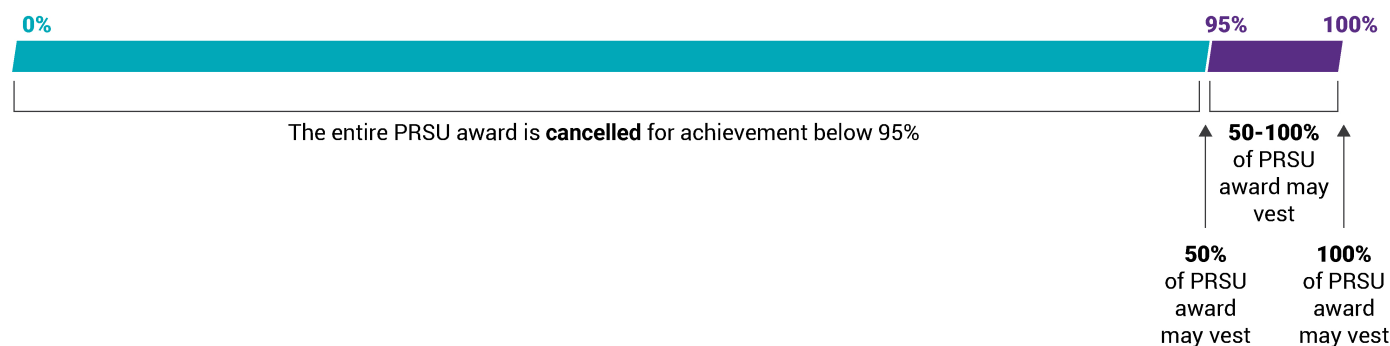
Our fiscal 2021 goal was substantially increased above our fiscal 2020 goal to a non-GAAP net income of \$972 million, which we believe was established at a level that would be appropriately difficult to attain.

Our fiscal 2021 Annual PRSUs vest over four years. Upon the achievement of the performance goal, only 25% of the Annual PRSU shares eligible to vest based on such performance vested at the end of the performance year. The remaining fiscal 2021 Annual PRSU shares that are eligible to vest, will vest annually over the following three years, provided the NEO continues to remain employed by Synopsys, which encourages retention as well as long-term focus and accountability.

Each fiscal 2021 Annual PRSU grant was made at the maximum number of shares that could be earned if we fully achieved our goal and would have been reduced for actual performance below it. There was no increase in shares for overachievement. The actual number of shares that were eligible to vest depended on the level of achievement of our goal, and achievement below 95% would have resulted in the cancellation of the entire award.

Adjustments. With respect to all PRSU awards (including the Fiscal 2019 Special PRSU Grants described below), the Compensation Committee generally may adjust the performance goal targets as permitted by the 2006 Employee Plan on or before the last day of the applicable performance period in order to give effect to acquisitions completed during the performance period or if it determines business conditions so warrant. No such adjustments were made in fiscal 2021 with respect to PRSU awards.

PERCENTAGE ACHIEVEMENT OF PRSU NON-GAAP NET INCOME PERFORMANCE GOAL



If we achieved between 95% and 100% of our performance goal, then between 50% and 100% of the fiscal 2021 Annual PRSU award would have been eligible to vest. The exact number of shares eligible to vest was calculated according to the following matrix approved by the Compensation Committee.

Percentage Achievement of Performance Goal(%)	Percentage of Annual PRSUs Eligible to Vest(%)
≥100%	100%
99	98
98	94
97	86
96	70
95	50
<95	—

The Compensation Committee rewarded 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 believed this design limited excessive risk-taking that could be encouraged by a single “all or nothing” performance condition.

Fiscal 2021 PRSU Non-GAAP Net Income Achievement. We achieved 110.8% of our fiscal 2021 non-GAAP net income performance goal of \$972 million, and accordingly, 25% of our NEOs' fiscal 2021 Annual PRSUs vested on December 9, 2021. The remaining 75% of the shares are scheduled to vest in three equal annual installments beginning on December 8, 2022, as long as the NEO provides continuous services to us.

NEO	Target PRSU Shares at Grant(#)	PRSU Shares Earned(#)	Resulting PRSU Shares Eligible for Vesting(#)
Aart J. de Geus	14,947	3,737	11,210
Chi-Foon Chan	14,947	3,737	11,210
Sassine Ghazi	10,677	2,670	8,007
Trac Pham	7,474	1,869	5,605
Joseph W. Logan	7,474	1,869	5,605
John F. Runkel, Jr.	4,698	1,175	3,523

PAYOUT OF PRSU GRANTS

In October 2019, the Compensation Committee approved special, long-term PRSU grants to our NEOs (Fiscal 2019 Special PRSU Grants) that were designed to (1) provide the NEOs with an additional incentive to achieve our substantial operating margin goals over the next three years, (2) recognize focused effort to achieve market expansion and increased profit from fiscal 2020 through fiscal 2022, and (3) align actions across our executive team to help ensure enterprise-wide success. These awards may be earned, if at all, based on Synopsys non-GAAP operating margin (as defined above under "Cash Incentive") achievement during each of fiscal 2020, 2021 and 2022.

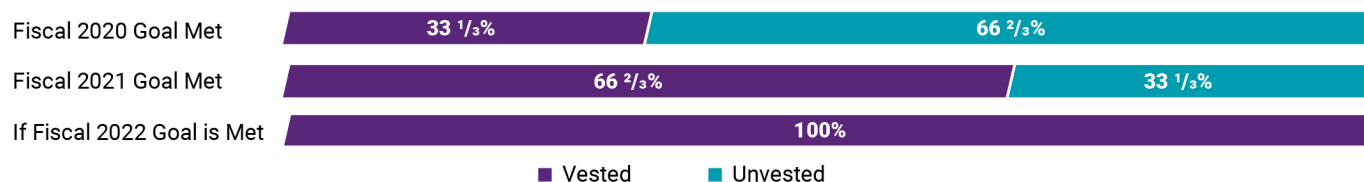
At the time of the grant of the Fiscal 2019 Special PRSU Grants, the Compensation Committee established a non-GAAP operating margin goal for each of fiscal 2020, 2021 and 2022. Following the end of each such fiscal year, a portion of the Fiscal 2019 Special PRSU Grants may be earned, generally subject to a specified non-GAAP operating margin target for each fiscal year, as determined by the Compensation Committee, and the NEO's continuous employment with Synopsys through the date of such determination (the Certification Date), as follows:

- if the fiscal 2020 non-GAAP operating margin goal* is achieved, 1/3 of the Fiscal 2019 Special PRSU Grants (the 2020 PRSUs) will vest;
- if the fiscal 2021 non-GAAP operating margin goal* is achieved, 1/3 of the Fiscal 2019 Special PRSU Grants (the 2021 PRSUs), plus the 2020 PRSUs (to the extent not previously earned), will vest; and
- if the fiscal 2022 non-GAAP operating margin goal* is achieved, 1/3 of the Fiscal 2019 Special PRSU Grants, plus the 2020 PRSUs and 2021 PRSUs (to the extent not previously earned), will vest.

* The non-GAAP operating margin goal increases in difficulty, reinforcing the stretch nature of the overall goals as well as the importance of sustainable profit performance each year to achieve all three goals.

The Fiscal 2019 Special PRSU Grant vesting schedule is illustrated in the table below:

PRSU GRANT VESTING



PRSUs that are not earned and vested as of the final Certification Date will be forfeited.

In September 2020, the Compensation Committee also granted promotional equity awards to Mr. Ghazi, which included a PRSU award (the 2021 promotional PRSUs). The Compensation Committee determined that Mr. Ghazi's 2021 promotional PRSUs would vest based on the same operating margin goals that apply to the remaining two tranches of his Fiscal 2019 Special PRSU Grant, subject to his continuous employment with Synopsys through the date the Compensation Committee determines that each such operating margin goal is achieved:

- 50% of Mr. Ghazi's 2021 promotional PRSUs will vest following the end of fiscal 2021, if the fiscal 2021 non-GAAP operating margin goal for his Fiscal 2019 Special PRSU Grant is achieved; and
- The remaining 50% of Mr. Ghazi's 2021 promotional PRSUs, plus the 2021 promotional PRSUs (to the extent not previously earned), will vest if the fiscal 2022 non-GAAP operating margin goal for his Fiscal 2019 Special PRSU Grant is achieved.

Fiscal 2021 PRSU Non-GAAP Operating Margin Goal Achievement. We exceeded our fiscal 2021 non-GAAP operating margin goal of 30.0%, and accordingly, 1/3 of our NEOs' Fiscal 2019 Special PRSU Grants and 1/2 of Mr. Ghazi's 2021 promotional PRSUs vested on December 9, 2021. To date, the first two tranches of the Fiscal 2019 Special PRSU Grants have vested and 1/2 of Mr. Ghazi's 2021 promotional PRSUs remain unvested. Each NEO's target number of PRSU shares, the number of shares that vested and the remaining PRSUs to be earned are set forth in the table below:

NEO	Target PRSU Shares(#)	PRSUs that Vested on 12/9/21 (#)	PRSUs Remaining to be Earned(#)
Aart J. de Geus	24,732	8,244	8,244
Chi-Foon Chan	24,732	8,244	8,244
Sassine Ghazi*	10,784	4,234	4,234
Trac Pham	13,061	4,354	4,353
Joseph W. Logan	11,116	3,705	3,705
John F. Runkel, Jr.	4,447	1,482	1,482

* Includes both Mr. Ghazi's Fiscal 2019 Special PRSU Grant and 2021 promotional PRSUs.

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 2021, except for Mr. Ghazi who received certain relocation benefits. In general, Synopsys and our Compensation Committee do not provide perquisites to our NEOs.

In April 2021, after considering the recommendations of Radford, its independent compensation consultant, the Compensation Committee approved a \$2,775,000 relocation assistance payment to Mr. Ghazi to help defray his actual relocation costs and the significant cost of living increase associated with Mr. Ghazi's relocation to the San Francisco Bay Area. In making this decision, the Compensation Committee also considered the importance of Mr. Ghazi's role and the considerable operational benefits that would be generated from his working primarily at our headquarters. Such payment is subject to repayment by Mr. Ghazi on a pro-rated basis if Synopsys terminates his employment for cause or he resigns other than for good reason prior to December 31, 2023.

Deferred Compensation Plans

We offer a deferred compensation program that allows highly compensated individuals, including our NEOs, to save a portion of their compensation on a tax-deferred basis 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 a legacy plan and closed to new participants). Under these plans, participants may elect to defer up to 50% of their salaries and up to 100% of their cash incentive compensation.

Severance and Change of Control Benefits

Name of Plan	Material Features
Executive Change of Control Severance Benefit Plan (Covers all NEOs except for co-CEOs)	<ul style="list-style-type: none"> • "Double-trigger" provisions to preserve morale and productivity, encourage executive retention to maintain the stability of our business during a change of control and protect executives in the event of job loss. • A departing executive officer must sign a separation and release agreement acceptable to us as a condition to receiving post-employment compensation payments or benefits. • Provides for benefits comparable to benefits offered by members of our peer group, which helps us attract talented executives and maintain a consistent management team.
Executive Severance Benefit and Transition Plan (Covers all NEOs except for co-CEOs)	<ul style="list-style-type: none"> • Limited cash severance and equity acceleration benefits. • A departing executive officer must sign a separation and release agreement acceptable to us and also comply with certain non-compete, non-solicitation and non-disparagement provisions as a condition to receiving post-employment compensation payments or benefits. • Further, an executive officer may be required to serve as a part-time employee in a pre-defined role for up to 9 months (at a greater than 50% rate with proportionately reduced base salary) at the sole discretion and request of Synopsys to ensure a smooth transition. • Provides for benefits comparable to benefits offered by members of our peer group.
Co-CEO Employment agreements	<ul style="list-style-type: none"> • Limited cash severance benefits outside of a change in control and double trigger provisions in the event of a change in control. • A departing executive officer must sign a separation and release agreement acceptable to us as a condition to receiving post-employment compensation payments or benefits. • Provides for benefits comparable to benefits offered by members of our peer group.
Equity Plans	<ul style="list-style-type: none"> • If we are acquired and the surviving company does not assume, replace or otherwise continue our outstanding equity awards, our equity incentive plan provides that all equity awards held by all employees will fully vest. • We provide this double trigger benefit to all employees who hold equity awards under our equity plan to promote the stability and focused service of our workforce during a potentially uncertain time.

See the subsection titled "Potential Payments upon Termination of Employment or Change of Control" in the "Executive Compensation Tables" section below for more information regarding each of these plans or arrangements as well as our potential payment obligations.

Fiscal 2022 NEO Compensation Decisions

Our Compensation Committee decided to adjust the compensation of certain of our continuing NEOs for fiscal 2022 to reflect Synopsys' sustained strong performance and to improve the competitiveness and holding power of the target direct compensation of such NEOs relative to our peer group, which has evolved in recent years to reflect our growth, and in the case of Mr. Ghazi, to also reflect his promotion to President effective November 1, 2021. Mr. Ghazi received a 20% increase in both his equity target and cash compensation, and Mr. Runkel received a 4.5% increase in his equity target compensation. For fiscal 2022, we have maintained our pay for performance philosophy, with approximately 90% of Target TDC for our continuing CEO being performance-based and/or at risk, and 89% of Target TDC for our other continuing NEOs, on average, as a group, being performance-based and/or at risk.

The design of our executive compensation program continues to evolve. Our Compensation Committee made certain changes to our executive compensation program to more closely align with Synopsys' business and organizational goals for fiscal 2022, as described on page 52 under "Fiscal 2022 Executive Compensation Overview."

Our Compensation Decision-making Process

ROLE OF COMPENSATION COMMITTEE

- Our Compensation Committee is responsible for determining NEO compensation and meets regularly throughout the year to review and discuss, among other items, our compensation philosophy, changes in compensation governance, compliance rules and best practices, and the composition of our peer group for pay comparisons.
- 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.

ROLE OF COMPENSATION COMMITTEE CONSULTANT

- Our Compensation Committee directly retained the services of Aon Rewards Solutions (Radford) as its independent compensation consultant for fiscal 2021.
- The Compensation Committee conducts an annual assessment of its consultant's performance and re-appoints its consultant each year.
- The Compensation Committee assessed the independence of Radford pursuant to the Nasdaq Listing Standards and SEC rules and concluded that Radford is independent and that no conflict of interest exists that would prevent Radford from serving as an independent consultant to the Compensation Committee.

In fiscal 2021, the services provided by Radford included:

- Assisting in the selection of our peer group companies for fiscal 2022 (and with the determination of our fiscal 2021 peer group in fiscal 2020);
- Providing and analyzing compensation market data;
- Helping the Compensation Committee interpret compensation market 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 providing compensation market 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 Compensation Committee in private sessions, without management present.

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.

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. At the time of the selection in April 2020, the Compensation Committee selected peer group companies for fiscal 2021 with an emphasis on companies that (1) were business or labor market competitors in the software (excluding gaming and e-commerce) or fabless semiconductor industries; (2) generated annual revenues between approximately 0.5 and 2.5 times Synopsys' revenue (approximately \$1.7 billion to \$8.4 billion); and (3) had a market capitalization between approximately 0.5 and 3.0 times Synopsys' market capitalization (approximately \$11.0 billion to \$65.0 billion).

Fiscal 2021 Peer Group	
Advanced Micro Devices, Inc.	Microchip Technology Inc.
Akamai Technologies, Inc.	NortonLifeLock Inc.
ANSYS, Inc.	Nuance Communications, Inc.
Autodesk, Inc.	Open Text Corporation
Cadence Design Systems, Inc.	Palo Alto Networks Inc.
Citrix Systems, Inc.	ServiceNow, Inc.
Fortinet, Inc.	Splunk Inc.
Intuit Inc.	Teradata Corporation
Keysight Technologies Inc.	Workday Inc.
Marvell Technology Group Ltd.	Xilinx, Inc.

Fortinet, Inc., Palo Alto Networks Inc. and Splunk, Inc. were added to our fiscal 2021 peer group because they meet the financial criteria set forth above, are companies in which we compete for talent, and operate in similar or adjacent industries as Synopsys. PTC, Inc. and Trimble Navigation Ltd. were removed from our fiscal 2021 peer group as these companies did not meet certain of our financial metrics and were no longer considered a peer in terms of talent competition. Red Hat, Inc. was acquired by International Business Machines Corporation, and was therefore removed from the peer group for fiscal 2021.

The Compensation Committee uses peer group comparisons to measure the competitiveness of our compensation practices. Pay at comparable companies is just one of the factors in the Compensation Committee's pay decisions, 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 factors that are deemed to be important based on the Compensation Committee's business judgment.

Stock Ownership Guidelines

We maintain stock ownership guidelines, which require individuals employed in specified positions to own certain levels of stock to align their interests with those of our stockholders, and to promote accountability and mitigate excessive risk taking in long-term decision making. Under our current stock ownership guidelines, each of our NEOs is required to hold the number of shares set forth below; provided however, that if the value of any NEO's shares drops below the applicable Minimum Value set forth below, such NEO will be required to hold the number of shares equal to the Minimum Value.

NEO	Share Number(#)	Minimum Value(\$)
Aart J. de Geus	25,000	\$ 4,400,000
Chi-Foon Chan	25,000	4,400,000
Sassine Ghazi	12,500	2,200,000
Trac Pham	6,500	1,100,000
Joseph W. Logan	6,500	1,100,000
John F. Runkel, Jr.	6,500	1,100,000

Other Important Compensation Practices

Policy	Considerations	Material Features
Anti-Hedging Policy	<ul style="list-style-type: none"> Hedging insulates executives from stock price movement and reduces alignment with stockholders. 	<ul style="list-style-type: none"> Pursuant to our insider trading policy, all employees, including our NEOs, and our directors are prohibited from engaging in the following types of hedging transactions involving our common stock: (1) selling short any Synopsys stock or other Synopsys securities, and (2) buying or selling puts or calls or other derivatives of Synopsys securities, or otherwise entering into any hedging arrangements involving Synopsys securities.
Anti-Pledging Policy	<ul style="list-style-type: none"> Pledging raises potential risks to stockholder value, particularly if the pledge is significant. 	<ul style="list-style-type: none"> Our insider trading policy prohibits our employees, including our NEOs, and our directors from holding our common stock in a margin account or pledging it as collateral for a loan.
Equity Grant Timing Policy	<ul style="list-style-type: none"> Equity award grants should not be timed to take advantage of the release of material nonpublic information. 	<ul style="list-style-type: none"> Executives are generally granted equity awards at the beginning of each fiscal year at a Compensation Committee meeting that is typically scheduled more than a year in advance, and on a date when the option exercise price reflects a fully informed market price. New-hire, promotional, or special recognition equity grants for executives are made shortly after the occurrence of the applicable event but not during closed windows.
Burn Rate Policy	<ul style="list-style-type: none"> Dilution to our existing stockholders should be closely managed. 	<ul style="list-style-type: none"> The Compensation Committee approves an annual gross equity budget at the beginning of the year to achieve a gross burn rate that approximates the average burn rate for peer group companies and the software and services industry more generally. Our gross share usage was 1.5% for fiscal 2021.
Clawback Policy	<ul style="list-style-type: none"> We should be able to recoup cash and equity awards in the event of a substantial restatement of our financial statements. 	<ul style="list-style-type: none"> We can “clawback” cash and equity compensation paid to covered employees, including our NEOs, in the event of a substantial restatement of our financial statements that are filed with the SEC if less compensation would have been earned by the employee based on the restated financial results.

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 corporate goals, reasonable in light of the programs of our peers, and responsible in encouraging our NEOs to strive 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, our Compensation Committee conducted an annual assessment of our company-wide compensation arrangements. The assessment process included, among other things, a review of:

- Our compensation philosophy;
- Comparative compensation at peer group companies;
- Our core compensation element mix; and
- The terms and payments under our cash and equity incentive plans.

As part of that review, our Compensation Committee asked Radford to perform a detailed review of our cash and equity compensation plans in comparison to market practices to determine if there were any areas of risk and recommend appropriate remediation policies, if necessary.

Risk Assessment Factors	
The Compensation Committee considered the following, among other factors, when determining the level of risk:	
Revenue model and cash incentive plan	Encourage our employees to focus on creating a stable, predictable stream of revenue over multiple years, rather than focusing on current year revenue at the expense of succeeding years.
Allocation of compensation	Effectively balances short-term performance and long-term performance.
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 multi-year period, to encourage our employees to remain focused on our performance beyond the immediate fiscal year.
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.
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.
Executive Incentive Plan	Caps cash incentive payments at a maximum award size. In addition, the Compensation Committee retains discretion to adjust our employees' incentive payments under the plan.
Cash incentive payments and equity awards for Corporate Staff	Subject to a clawback policy to recover compensation in the event of a substantial financial restatement.

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.

Compensation Committee Report*

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this Proxy Statement with management. Based on the Compensation Committee's review of, and the discussions with management with respect to, the Compensation Discussion and Analysis, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement and incorporated into our Annual Report on Form 10-K for filing with the SEC.

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

COMPENSATION AND ORGANIZATIONAL DEVELOPMENT COMMITTEE

Chrysostomos L. "Max" Nikias, Chair
 Janice D. Chaffin
 Bruce R. Chizen

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

Compensation Committee Interlocks and Insider Participation

During fiscal 2021, Chrysostomos L. “Max” Nikias, Janice D. Chaffin and Bruce R. Chizen served on the Compensation Committee. None of the members of the Compensation Committee is nor, during fiscal 2021, was an officer or employee of Synopsys, none of the members of the Compensation Committee was formerly an officer of Synopsys, and none had or have any relationships with Synopsys that are required to be disclosed under Item 404 of Regulation S-K. None of our executive officers serve or, during fiscal 2021, served as a member of a board of directors or compensation committee of any entity that has or, during fiscal 2021, had one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

Executive Compensation Tables

Summary Compensation Table

The following table shows compensation awarded to, paid to, or earned by each of our NEOs for each of the last three or fewer fiscal years during which such individuals were determined to be NEOs. Our NEOs for fiscal 2021 consisted of: Dr. de Geus and Dr. Chan, our co-Chief Executive Officers; Mr. Ghazi, our President and Chief Operating Officer; Mr. Pham, our Chief Financial Officer; Mr. Logan, our Chief Revenue Officer; and Mr. Runkel, our General Counsel and Corporate Secretary.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$) ⁽¹⁾⁽²⁾	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽³⁾	All Other Compensation (\$) ⁽⁴⁾	Total (\$) ⁽⁵⁾
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	2021	\$ 540,000	\$ —	\$ 5,250,326	\$ 1,750,009	\$ 2,430,000	\$ 4,650	\$ 9,974,985
	2020	540,000	—	2,300,041	2,300,025	1,625,000	3,500	6,768,566
	2019	540,000	—	5,562,554	2,224,994	1,296,000	4,077	9,627,625
Chi-Foon Chan Co-Chief Executive Officer	2021	540,000	—	5,250,326	1,750,009	2,430,000	6,150	9,976,485
	2020	540,000	—	2,300,041	2,300,025	1,625,000	4,600	6,769,666
	2019	540,000	—	5,562,554	2,224,994	1,296,000	4,759	9,628,307
Sassine Ghazi President and Chief Operating Officer	2021	500,000	—	3,750,467	1,250,006	1,500,000	2,779,150	9,779,623
	2020	430,000	—	2,915,985	2,100,016	895,000	68,317	6,409,318
Trac Pham Chief Financial Officer	2021	475,000	—	2,625,280	875,035	890,600	5,905	4,871,820
	2020	475,000	—	1,350,104	1,350,014	715,000	4,250	3,894,368
	2019	455,000	—	2,937,540	1,174,986	409,500	5,154	4,982,180
Joseph W. Logan Chief Revenue Officer	2021	450,000	—	2,625,280	875,035	1,215,000	4,650	5,169,965
	2020	450,000	—	1,250,096	1,250,021	1,015,000	4,500	3,969,617
	2019	450,000	—	2,500,031	999,999	675,000	3,000	4,628,030
John F. Runkel, Jr. General Counsel and Corporate Secretary	2021	425,000	—	1,650,196	550,051	557,800	4,900	3,187,947
	2020	425,000	—	775,060	775,015	430,000	4,000	2,409,075
	2019	400,000	—	1,050,090	449,991	280,000	5,154	2,185,235

(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 2021, fiscal 2020, and fiscal 2019 as computed in accordance with ASC Topic 718, *Compensation—Stock Compensation*. For each restricted stock unit 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. For each option award, the grant date fair value is calculated using the Black-Scholes option-pricing model. These amounts do not represent the actual value that may be realized by the NEO upon vesting, exercise or settlement of such awards. For information on the assumptions used to calculate the value of the awards, refer to Note 12 to the consolidated financial statements contained in our 2021 Annual Report on Form 10-K.

(2) Amounts in fiscal 2019 include the Fiscal 2019 Special PRSU Grants awarded in October 2019, as further described in the "Compensation Discussion and Analysis" section beginning on page 50 under the subsection titled "Equity Awards."

(3) Amounts consist of cash-based incentive compensation earned for the achievement of performance objectives approved by our Compensation Committee for fiscal 2021, fiscal 2020, and fiscal 2019, as applicable, under our Executive Incentive Plan (EIP).

(4) Amounts for fiscal 2021 include the following:

Name	401(k) Matching Contributions (\$) ^(A)	HSA Matching Contributions (\$) ^(B)	Charitable Matching Contributions (\$) ^(C)	Non-Cash Award (\$)	Service Award (\$)	Relocation Expenses (\$) ^(D)	Total (\$)
Aart J. de Geus	\$ 3,000	\$ 500	\$ 1,000	\$ 150	\$ —	\$ —	\$ 4,650
Chi-Foon Chan	3,000	1,500	—	150	1,500	—	6,150
Sassine Ghazi	3,000	1,000	—	150	—	2,775,000	2,779,150
Trac Pham	3,000	1,000	1,500	405	—	—	5,905
Joseph W. Logan	3,000	—	500	150	1,000	—	4,650
John F. Runkel, Jr.	3,000	1,500	—	150	250	—	4,900

(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.

(C) Amounts include matching contributions made by the Synopsys Foundation on behalf of our NEOs as part of a broad-based charitable matching program available to all U.S. employees.

(D) Amount paid to Mr. Ghazi to incentivize him to relocate to the San Francisco Bay Area, where Synopsys is headquartered.

- (5) 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.

Grants of Plan-Based Awards

The following table sets forth certain information with respect to grants of plan-based awards in fiscal 2021 to our NEOs, including cash awards and equity awards. The equity awards granted to our NEOs in fiscal 2020 were granted under our 2006 Employee Equity Incentive Plan.

Name	Grant Type	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards ⁽¹⁾			Estimated Future Payouts Under Equity Incentive Plan Awards ⁽²⁾			All Other Stock Awards: Number of Shares of Stock or Units (#) ⁽³⁾	All Other Option Awards: Number of Securities Underlying Options (#) ⁽⁴⁾	Exercise or Base Price of Option Awards (\$/Sh) ⁽⁵⁾	Grant Date Fair Value of Stock and Option Awards (\$) ⁽⁶⁾
			Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)				
Aart J. de Geus	Cash Incentive	N/A	\$ 874,800	\$1,296,000	\$2,592,000	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
	PRSUs	12/10/2020	—	—	—	7,474	14,947	14,947	—	—	—	3,500,139
	Options	12/10/2020	—	—	—	—	—	—	—	28,987	234.17	1,750,009
	RSUs	12/10/2020	—	—	—	—	—	—	7,474	—	—	1,750,187
Chi-Foon Chan	Cash Incentive	N/A	874,800	1,296,000	2,592,000	—	—	—	—	—	—	—
	PRSUs	12/10/2020	—	—	—	7,474	14,947	14,947	—	—	—	3,500,139
	Options	12/10/2020	—	—	—	—	—	—	—	28,987	234.17	1,750,009
	RSUs	12/10/2020	—	—	—	—	—	—	7,474	—	—	1,750,187
Sassine Ghazi	Cash Incentive	N/A	506,250	750,000	1,500,000	—	—	—	—	—	—	—
	PRSUs	12/10/2020	—	—	—	5,339	10,677	10,677	—	—	—	2,500,233
	Options	12/10/2020	—	—	—	—	—	—	—	20,705	234.17	1,250,006
	RSUs	12/10/2020	—	—	—	—	—	—	5,339	—	—	1,250,234
Trac Pham	Cash Incentive	N/A	320,625	475,000	950,000	—	—	—	—	—	—	—
	PRSUs	12/10/2020	—	—	—	3,737	7,474	7,474	—	—	—	1,750,187
	Options	12/10/2020	—	—	—	—	—	—	—	14,494	234.17	875,035
	RSUs	12/10/2020	—	—	—	—	—	—	3,737	—	—	875,093
Joseph W. Logan	Cash Incentive	N/A	455,625	675,000	1,350,000	—	—	—	—	—	—	—
	PRSUs	12/10/2020	—	—	—	3,737	7,474	7,474	—	—	—	1,750,187
	Options	12/10/2020	—	—	—	—	—	—	—	14,494	234.17	875,035
	RSUs	12/10/2020	—	—	—	—	—	—	3,737	—	—	875,093
John F. Runkel, Jr.	Cash Incentive	N/A	215,156	318,750	637,500	—	—	—	—	—	—	—
	PRSUs	12/10/2020	—	—	—	2,349	4,698	4,698	—	—	—	1,100,131
	Options	12/10/2020	—	—	—	—	—	—	—	9,111	234.17	550,051
	RSUs	12/10/2020	—	—	—	—	—	—	2,349	—	—	550,065

- (1) Represents possible cash award payouts for fiscal 2021 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 the "Compensation Discussion and Analysis" section beginning on page 50 under the subsection titled "Cash Incentive." Pursuant to the EIP, if the average achievement of the Corporate Financial Goals is below 90% and/or the threshold payment goal, no cash awards are paid. The amounts listed under the "Target" column represent the cash awards payable in fiscal 2021 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 2021 are reported in the "Summary Compensation Table" on page 72 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 granted on December 10, 2020 was the achievement of \$972.0 million of non-GAAP net income for fiscal 2021, as further described in the "Compensation Discussion and Analysis" section beginning on page 50 under the subsection titled "Equity Awards." The amounts listed under the "Target" and "Maximum" columns for the December 10, 2020 award 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 for the December 10, 2020 award 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 portion of the December 10, 2020 stock awards is eligible to vest. As the target vesting criterion was achieved at more than 100%, 25% of each respective maximum award vested on December 9, 2021, and the remaining 75% of each respective award is scheduled to vest in three equal annual installments beginning on December 8, 2022, so long as the NEO provides continuous services to us.
- (3) Represents a time-based restricted stock unit award, which vests annually over four years, so long as the NEO provides continuous services to us.
- (4) The option vested with respect to 25% of the shares on the first anniversary of the Grant Date and with respect to 3/48ths of the shares quarterly thereafter, such that the entire award will be vested on December 10, 2024, so long as the NEO provides continuous services to us.
- (5) Represents the closing price of our common stock as reported on the Nasdaq Global Select Market on December 10, 2020, the effective date of grant of these awards.
- (6) Represents the fair value of the stock and option awards on the grant date, as computed in accordance with FASB ASC Topic 718. These amounts do not represent the actual value that may be realized by the NEO upon vesting, exercise or settlement of such awards. For information on the assumptions used to calculate the fair value of the stock and option awards, refer to Note 12 to the consolidated financial statements contained in our 2021 Annual Report on Form 10-K.

Outstanding Equity Awards at Fiscal 2021 Year-End

The following table summarizes the number of securities underlying outstanding equity awards for our NEOs as of October 30, 2021, the last day of fiscal 2021:

Name	Grant Date	Option Awards				Stock Awards			
		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	12/15/2016	160,899	—	60.37	12/15/2023	—	—	—	—
	12/08/2017	113,286	7,553 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	6,214 ⁽³⁾	2,070,381	—	—
	12/12/2018	71,944	32,702 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	12,394 ⁽⁵⁾	4,129,433	—	—
	10/18/2019	—	—	—	—	8,244 ⁽¹⁰⁾	2,746,736	8,244 ⁽¹⁰⁾	2,746,736
	12/12/2019	32,656	41,985 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	12,695 ⁽⁷⁾	4,229,720	—	—
	12/10/2020	—	28,987 ⁽⁸⁾	234.17	12/10/2027	—	—	—	—
	12/10/2020	—	—	—	—	3,737 ⁽⁹⁾	1,245,094	11,210 ⁽⁹⁾	3,734,948
	12/10/2020	—	—	—	—	7,474 ⁽¹⁴⁾	2,490,187	—	—
Chi-Foon Chan	12/08/2017	7,552	7,553 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	6,214 ⁽³⁾	2,070,381	—	—
	12/12/2018	71,944	32,702 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	12,394 ⁽⁵⁾	4,129,433	—	—
	10/18/2019	—	—	—	—	8,244 ⁽¹⁰⁾	2,746,736	8,244 ⁽¹⁰⁾	2,746,736
	12/12/2019	32,656	41,985 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	12,695 ⁽⁷⁾	4,229,720	—	—
	12/10/2020	—	28,987 ⁽⁸⁾	234.17	12/10/2027	—	—	—	—
	12/10/2020	—	—	—	—	3,737 ⁽⁹⁾	1,245,094	11,210 ⁽⁹⁾	3,734,948
	12/10/2020	—	—	—	—	7,474 ⁽¹⁴⁾	2,490,187	—	—
	12/10/2020	—	—	—	—	—	—	—	—
Sassine Ghazi	5/22/2015	8,948	—	49.35	5/22/2022	—	—	—	—
	5/20/2016	3,209	—	49.92	5/20/2023	—	—	—	—
	6/17/2016	1,442	—	52.46	6/17/2023	—	—	—	—
	12/15/2016	58,272	—	60.37	12/15/2023	—	—	—	—
	12/08/2017	28,951	1,930 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	1,588 ⁽³⁾	529,090	—	—
	12/12/2018	23,442	10,656 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	4,038 ⁽⁵⁾	1,345,381	—	—
	10/18/2019	—	—	—	—	2,316 ⁽¹⁰⁾	771,645	2,316 ⁽¹⁰⁾	771,645
	12/12/2019	19,167	24,644 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	7,452 ⁽⁷⁾	2,482,857	—	—
	9/28/2020	3,447	10,338 ⁽¹¹⁾	212.64	9/28/2027	—	—	—	—
	9/28/2020	—	—	—	—	2,646 ⁽¹²⁾	881,594	—	—
	9/28/2020	—	—	—	—	1,918 ⁽¹³⁾	639,039	1,918 ⁽¹³⁾	639,039
	12/10/2020	—	20,705 ⁽⁸⁾	234.17	12/10/2027	—	—	—	—
	12/10/2020	—	—	—	—	2,670 ⁽⁹⁾	889,591	8,007 ⁽⁹⁾	2,667,772
	12/10/2020	—	—	—	—	5,339 ⁽¹⁴⁾	1,778,848	—	—

Name	Grant Date	Option Awards				Stock Awards			
		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⁾
Trac Pham	12/08/2017	30,879	3,609 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	2,969 ⁽³⁾	989,211	—	—
	12/12/2018	37,992	17,270 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	6,544 ⁽⁵⁾	2,180,330	—	—
	10/18/2019	—	—	—	—	4,354 ⁽¹⁰⁾	1,450,666	4,353 ⁽¹⁰⁾	1,450,332
	12/12/2019	19,167	24,644 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	7,452 ⁽⁷⁾	2,482,857	—	—
	12/10/2020	—	14,494 ⁽⁸⁾	234.17	12/10/2027	—	—	—	—
	12/10/2020	—	—	—	—	1,869 ⁽⁹⁾	622,713	5,605 ⁽⁹⁾	1,867,474
	12/10/2020	—	—	—	—	3,737 ⁽¹⁴⁾	1,245,094	—	—
Joseph W. Logan	12/15/2015	6,053	—	45.23	12/15/2022	—	—	—	—
	12/15/2016	86,973	—	60.37	12/15/2023	—	—	—	—
	12/08/2017	50,349	3,357 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	2,762 ⁽³⁾	920,243	—	—
	12/12/2018	32,334	14,698 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	5,570 ⁽⁵⁾	1,855,813	—	—
	10/18/2019	—	—	—	—	3,705 ⁽¹⁰⁾	1,234,432	3,705 ⁽¹⁰⁾	1,234,432
	12/12/2019	17,748	22,818 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	6,900 ⁽⁷⁾	2,298,942	—	—
	12/10/2020	—	14,494 ⁽⁸⁾	234.17	12/20/2027	—	—	—	—
	12/10/2020	—	—	—	—	1,869 ⁽⁹⁾	622,713	5,605 ⁽⁹⁾	1,867,474
	12/10/2020	—	—	—	—	3,737 ⁽¹⁴⁾	1,245,094	—	—
John F. Runkel, Jr.	12/08/2017	—	1,343 ⁽²⁾	90.51	12/08/2024	—	—	—	—
	12/08/2017	—	—	—	—	1,104 ⁽³⁾	367,831	—	—
	12/12/2018	—	6,614 ⁽⁴⁾	89.76	12/12/2025	—	—	—	—
	12/12/2018	—	—	—	—	2,506 ⁽⁵⁾	834,949	—	—
	10/18/2019	—	—	—	—	1,482 ⁽¹⁰⁾	493,773	1,482 ⁽¹⁰⁾	493,773
	12/12/2019	—	14,148 ⁽⁶⁾	135.88	12/12/2026	—	—	—	—
	12/12/2019	—	—	—	—	4,278 ⁽⁷⁾	1,425,344	—	—
	12/10/2020	—	9,111 ⁽⁸⁾	234.17	12/10/2027	—	—	—	—
	12/10/2020	—	—	—	—	1,175 ⁽⁹⁾	391,487	3,523 ⁽⁹⁾	1,173,793
	12/10/2020	—	—	—	—	2,349 ⁽¹⁴⁾	782,640	—	—

⁽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 \$333.18 on October 29, 2021, the last trading day of fiscal 2021, as reported on the Nasdaq Global Select Market.

⁽²⁾ Option vests as to 25% of the shares subject to the option on the one-year anniversary of the grant date and thereafter, as to 6.25% of such shares on the three month anniversary of the grant date, such that the entire award will be fully vested on December 8, 2021 so long as the NEO provides continuous services to us.

⁽³⁾ These restricted stock unit awards were eligible to vest in four equal annual installments upon achievement of pre-established performance goals, namely the achievement of \$529 million of non-GAAP net income for fiscal 2018. This goal was achieved and, accordingly, 25% of the target awards vested on each of December 12, 2018, December 8, 2019, and December 8, 2020, respectively, and the remaining 25% vested subsequent to fiscal year end on December 8, 2021.

⁽⁴⁾ Option vests as to 25% of the shares subject to the option on the one-year anniversary of the grant date and thereafter, as to 6.25% of such shares on the three month anniversary of the grant date, such that the entire award will be fully vested on December 12, 2022, so long as the NEO provides continuous services to us.

⁽⁵⁾ These restricted stock unit awards were eligible to vest in four equal annual installments upon achievement of pre-established performance goals, namely the achievement of \$640 million of non-GAAP net income for fiscal 2019. This goal was achieved and, accordingly, 25% of the target awards vested on each of December 12, 2019 and December 8, 2020, and, subsequent to fiscal year end, on December 8, 2021, respectively, and the remaining 25% are scheduled to vest on December 8, 2022, so long as the NEO provides continuous services to us.

⁽⁶⁾ Option vests as to 25% of the shares subject to the option on the one-year anniversary of the grant date and thereafter, as to 6.25% of such shares on the three month anniversary of the grant date, such that the entire award will be fully vested on December 12, 2023, so long as the NEO provides continuous services to us.

⁽⁷⁾ These restricted stock unit awards were eligible to vest in four equal annual installments upon achievement of pre-established performance goals, namely the achievement of \$790 million of non-GAAP net income for fiscal 2020. This goal was achieved and, accordingly, 25% of the target awards vested on each of December 10, 2020 and subsequent to fiscal year end on December 8, 2021, respectively, and the remaining 50% are scheduled to vest in two equal annual installments beginning on December 8, 2022, so long as the NEO provides continuous services to us.

- (8) 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, such that the entire award will be fully vested on December 10, 2024, so long as the NEO provides continuous services to us.
- (9) These restricted stock unit awards were eligible to vest in four equal annual installments upon achievement of pre-established performance goals, namely the achievement of \$972 million of non-GAAP net income for fiscal 2021 as further described in the "Compensation Discussion and Analysis" section beginning on page 50, 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 9, 2021, and the remaining 75% are scheduled to vest in three equal annual installments beginning on December 8, 2022, so long as the NEO provides continuous services to us. The number of PRSUs that vested on December 9, 2021 is reported in the "Number of Shares or Units of Stock That Have Not Vested" column and the market value of such PRSUs is reported in the "Market Value of Shares or Units of Stock That Have Not Vested" column.
- (10) These restricted stock unit awards vest based on non-GAAP operating margin performance in fiscal 2020, 2021 and fiscal 2022 as follows, as further described in the "Compensation Discussion and Analysis" section beginning on page 50, under the subsection titled "Equity Awards": (1) if the fiscal 2020 non-GAAP operating margin target is achieved, 1/3 of the PRSUs will vest on the date that the Compensation Committee certifies the level of achievement of such target; (2) if the fiscal 2021 non-GAAP operating margin target is achieved, 1/3 of the PRSUs, plus the PRSUs referred to in section (1) above (to the extent not previously earned) will vest on the date that the Compensation Committee certifies the level of achievement of such target; and (3) if the fiscal 2022 non-GAAP operating margin target is achieved, 1/3 of the PRSUs, plus the PRSUs referred to in sections (1) and (2) above (to the extent not previously earned) will vest on the date that the Compensation Committee certifies the level of achievement of such target, so long as the NEO provides continuous services to us through each such certification date. 1/3 of the PRSUs vested on December 9, 2021, which number of PRSUs is reported in the "Number of Shares or Units of Stock That Have Not Vested" column and the market value of such PRSUs is reported in the "Market Value of Shares or Units of Stock That Have Not Vested" column. To date, the first two tranches of these restricted stock unit awards have vested.
- (11) 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, such that the entire award will be fully vested on September 28, 2024, so long as Mr. Ghazi provides continuous services to us.
- (12) This restricted stock unit award vests in four equal annual installments beginning on September 15, 2021, so long as Mr. Ghazi provides continuous services to us.
- (13) This restricted stock unit award vests based on non-GAAP operating margin performance in fiscal 2021 and fiscal 2022 as follows, as further described in the "Compensation Discussion and Analysis" section beginning on page 50, under the subsection titled "Equity Awards": (1) if the fiscal 2021 non-GAAP operating margin target is achieved, 1/2 of the PRSUs will vest on the date that the Compensation Committee certifies the level of achievement of such target; and (2) if the fiscal 2022 non-GAAP operating margin target is achieved, the remaining 1/2 of the PRSUs, plus the PRSUs referred to in (1) above (to the extent not previously earned) will vest on the date that the Compensation Committee certifies the level of achievement of such target, so long as the NEO provides continuous services to us through each such certification date. 1/2 of the PRSUs vested on December 9, 2021, which number of PRSUs is reported in the "Number of Shares or Units of Stock That Have Not Vested" column and the market value of such PRSUs is reported in the "Market Value of Shares or Units of Stock That Have Not Vested" column.
- (14) This restricted stock unit award vests in four equal annual installments beginning on December 8, 2021, so long as the NEO provides continuous services to us.

Option Exercises and Stock Vested in Fiscal 2021

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 2021.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$) ⁽¹⁾	Number of Shares Acquired on Vesting (#) ⁽²⁾	Value Realized on Vesting (\$) ⁽³⁾
Aart J. de Geus	187,007	\$ 37,726,788	32,549	\$ 7,714,134
Chi-Foon Chan	266,633	64,700,975	32,549	7,714,134
Sassine Ghazi	3,590	769,880	11,069	2,706,648
Trac Pham	90,000	20,341,904	16,237	3,867,650
Joseph W. Logan	129,406	27,107,755	15,694	3,719,532
John F. Runkel, Jr.	23,717	3,783,004	6,830	1,617,378

(1) The value realized on exercise equals the difference between (a) the closing price per share of our common stock as reported on the Nasdaq Global Select Market on or prior to the date of exercise if the shares were held, and (b) the applicable exercise price of such stock options.

(2) Such number of shares represents the gross number of shares acquired by the NEO on the vesting date. Synopsys withholds shares for tax purposes and the NEO actually receives a smaller number of shares.

(3) The value realized on vesting equals the closing price per share of our common stock as reported on the Nasdaq Global Select Market on the vesting date multiplied by the gross number of shares acquired on vesting as described above in note (2).

Non-Qualified Deferred Compensation

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

The Deferred Compensation Plan I governs 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 distributed under 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 2021 (\$) ⁽¹⁾	Synopsys, Inc. Contributions in Fiscal 2021 (\$)	Aggregate Earnings in Fiscal 2021 (\$) ⁽²⁾	Aggregate Withdrawals/Distributions in Fiscal 2021 (\$)	Aggregate Balance at End of Fiscal 2021 (\$)
Aart J. de Geus	\$ —	\$ —	\$ —	\$ —	\$ —
Chi-Foon Chan	—	—	2,691,197 ⁽³⁾	—	12,294,141 ⁽⁴⁾
Sassine Ghazi	321,154 ⁽⁵⁾	—	922,010 ⁽⁶⁾	—	3,349,554 ⁽⁷⁾
Trac Pham	—	—	1,507,363 ⁽⁶⁾	—	7,137,230 ⁽⁸⁾
Joseph W. Logan	—	—	—	—	—
John F. Runkel, Jr.	757,192 ⁽⁹⁾	—	430,163 ⁽⁶⁾	—	3,246,972 ⁽¹⁰⁾

⁽¹⁾ All contributions in fiscal 2021 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 72.

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

⁽⁴⁾ The entire aggregate balance was subject to the Deferred Compensation Plan I and did not include any compensation reported in the Summary Compensation Table.

⁽⁵⁾ Includes \$300,000 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2021 though paid in fiscal 2022 and \$21,154 of base salary reported in the Summary Compensation Table under the "Salary" column for fiscal 2021.

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

⁽⁷⁾ Includes \$165,015, which was previously reported as compensation to Mr. Ghazi in the Summary Compensation Table for fiscal years prior to fiscal 2021. The entire aggregate balance at the end of fiscal 2021 was subject to the Deferred Compensation Plan II.

⁽⁸⁾ Includes \$3,271,519, which was previously reported as compensation to Mr. Pham in the Summary Compensation Table for fiscal years prior to fiscal 2021. The entire aggregate balance at the end of fiscal 2021 was subject to the Deferred Compensation Plan II.

⁽⁹⁾ Includes \$544,692 of cash incentive compensation reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for services performed in fiscal 2021 though paid in fiscal 2022 and \$212,500 of base salary reported in the Summary Compensation Table under the "Salary" column for fiscal 2021.

⁽¹⁰⁾ Includes \$2,462,882, which was previously reported as compensation to Mr. Runkel in the Summary Compensation Table for fiscal years prior to fiscal 2021. The entire aggregate balance at the end of fiscal 2021 was subject to the Deferred Compensation Plan II.

Potential Payments Upon Termination of Employment or Change of Control

Set forth below is a description of potential payments to our NEOs upon a termination of employment or a change of control. For additional information regarding the arrangements for such payments, please also refer to the “Severance and Change of Control Benefits” discussion in the “Compensation Discussion and Analysis” section beginning on page 65.

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 30, 2021, the last day of fiscal 2021. The payments set forth below are payable to: (1) Dr. de Geus and Dr. Chan pursuant to their employment agreements; and (2) Mr. Ghazi, Mr. Pham, Mr. Logan and Mr. Runkel, in their capacity as executive officers, pursuant to the Executive Change of Control Severance Benefit Plan as in effect on the last day of fiscal 2021.

In the event of an involuntary termination of their respective employment other than for cause or as a result of death or disability 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. Ghazi, 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 for cause or is a voluntary termination without good reason.

Name	Salary-Based Severance(\$)	Cash-Based Incentive Award(\$)	Health and Welfare Benefit(\$)	Intrinsic Value of Unvested RSU Awards(\$) ⁽¹⁾	Intrinsic Value of Unvested Option Awards(\$) ⁽¹⁾
Aart J. de Geus	\$ 1,080,000	\$ 2,592,000	\$ 12,468	\$ 23,393,234	\$ 20,946,851
Chi-Foon Chan	1,080,000	2,592,000	27,807	23,393,234	20,946,851
Sassine Ghazi	500,000	1,500,000 ⁽²⁾	24,163	13,396,501	11,220,642
Trac Pham	475,000	950,000 ⁽²⁾	27,550	12,288,678	11,376,972
Joseph W. Logan	450,000	1,350,000 ⁽²⁾	21,168	11,279,143	10,329,473
John F. Runkel, Jr.	425,000	637,500 ⁽²⁾	25,870	5,963,589	5,629,366

⁽¹⁾ Amounts represent the intrinsic value of accelerated restricted stock units and stock options based upon \$333.18, the closing price per share of our common stock on October 29, 2021, the last trading day of fiscal 2021, as reported on the Nasdaq Global Select Market.

⁽²⁾ The last day of our fiscal 2021 was Saturday, October 30, 2021. 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. Ghazi, Mr. Pham, Mr. Logan, and Mr. Runkel in the event of their terminations in connection with a change of control as of October 30, 2021, each would be entitled to two times his target cash incentive payment, given that each would have worked the entirety of fiscal 2021 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 30, 2021, the last day of fiscal 2021. 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-Based Severance(\$)	Cash-Based Incentive Award (\$)	Health and Welfare Benefit(\$)	Intrinsic Value of Unvested Stock Awards(\$) ⁽¹⁾	Intrinsic Value of Unvested Option Awards(\$) ⁽¹⁾
Aart J. de Geus	\$ —	\$ —	\$ —	\$ 23,393,234	\$ 20,946,851
Chi-Foon Chan	—	—	—	23,393,234	20,946,851
Sassine Ghazi	—	—	—	13,396,501	11,220,642
Trac Pham	—	—	—	12,288,678	11,376,972
Joseph W. Logan	—	—	—	11,279,143	10,329,473
John F. Runkel, Jr.	—	—	—	5,963,589	5,629,366

⁽¹⁾ Amounts represent the intrinsic value of accelerated restricted stock units and stock options based upon \$333.18, the closing price per share of our common stock on October 29, 2021, the last trading day of fiscal 2021, as reported on the Nasdaq Global Select Market.

Potential Payments upon Involuntary Termination of Employment

Dr. de Geus and Dr. Chan are entitled to severance benefits in the event their employment is involuntarily terminated other than for cause or as a result of death or disability 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. 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 30, 2021, the last day of fiscal 2021. 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.

In February 2021, the Compensation Committee approved the Executive Severance Benefit and Transition Plan (the Severance Plan) to offer severance benefits to designated key employees outside of a change of control. Each of our current executive officers is covered under the Severance Plan, except Dr. de Geus and Dr. Chan. The Severance Plan provides that in the event a participant is terminated without cause or resigns for good reason, such participant shall be entitled to (1) a cash severance payment equal to (i) 12 months of his or her base salary and (ii) the cost of 12 months of COBRA premiums, and (2) six months of vesting acceleration of his or her equity awards that remain subject only to time-based vesting conditions. In addition, such participant shall remain eligible to earn an annual cash incentive award under the EIP based on actual results achieved or if lower, target, which will be pro-rated based on the number of months the participant served as a full-time employee during the applicable performance period.

Such severance benefits are subject to certain conditions, including the provision of up to 9 months of part-time employment (at a greater than 50% rate with proportionately reduced base salary) at the sole discretion and request of Synopsys, compliance with certain non-compete, non-solicitation and non-disparagement provisions, and the execution of a release of claims against Synopsys. The table below outlines the potential payments and benefits payable to each NEO as if such NEO was terminated by Synopsys on October 30, 2021, the last day of fiscal 2021.

Name	Salary-Based Severance(\$)	Cash-Based Incentive Award(\$) ⁽¹⁾	Health and Welfare Benefit(\$)	Intrinsic Value of Unvested RSU Awards(\$) ⁽²⁾	Intrinsic Value of Unvested Option Awards(\$) ⁽²⁾
Aart J. de Geus	\$ 540,000	\$ 1,296,000	\$ 8,294	\$ —	\$ —
Chi-Foon Chan	540,000	1,296,000	18,497	—	—
Sassine Ghazi	500,000	750,000	24,163	2,474,195	3,434,608
Trac Pham	475,000	475,000	27,550	3,218,519	4,086,172
Joseph W. Logan	450,000	675,000	21,168	2,925,987	3,694,437
John F. Runkel, Jr.	425,000	318,750	25,870	1,456,330	1,871,944

⁽¹⁾ Amounts represent the cash-based incentive award that would be received under the EIP assuming (i) the average achievement of our Corporate Financial Goals is equal to 100.0% and (ii) 12 months served as a full-time employee during the applicable period.

⁽²⁾ Amounts represent the intrinsic value of accelerated restricted stock units and stock options based upon \$333.18, the closing price per share of our common stock on October 29, 2021, the last trading day of fiscal 2021, as reported on the Nasdaq Global Select Market.

Pay Ratio Disclosure

In accordance with SEC rules, we are providing the following information about the relationship of the annual total compensation of our employees (other than our co-CEOs) to the annual total compensation of our co-CEOs.

This disclosure should be considered within the context of our structure and operations. Although our headquarters are located in California, we have employees in approximately 30 countries. As of the end of fiscal 2021, approximately 72% of our employees were based outside of the United States. Our Compensation Committee has designed our executive compensation program to provide competitive and internally equitable compensation and benefits opportunities for all employees. Our general employee compensation program is designed separately from the executive officer compensation program to be competitive based on an employee's position and geographic location.

CEO Pay Ratio

For fiscal 2021:

- The annual total compensation of our median employee in fiscal 2021 was \$98,215, and was calculated by totaling for our median employee all applicable elements of compensation for fiscal 2021 in accordance with Item 402(c)(2)(x) of Regulation S-K.
- The annual total compensation of Dr. de Geus and Dr. Chan was \$9,974,985 and \$9,976,485, respectively, which amounts represent the total compensation reported for each co-CEO under the "Summary Compensation Table" for fiscal 2021.

Based on the above, the ratio of the annual total compensation of each of our co-CEOs to the annual total compensation of our median employee for fiscal 2021 is estimated to be 102 to 1.

Assumptions and Methodology

In accordance with SEC rules, the median employee is required to be determined once every three years so long as there have been no changes in the last fiscal year to our employee population or compensation arrangement that we reasonably believe would result in a significant change to our pay ratio disclosure. We last chose our median employee in fiscal 2018. As such, we selected a new median employee in fiscal 2021 based on the criteria set forth below.

We selected October 30, 2021, the last day of fiscal 2021, as the date on which to determine our median employee. We did not exclude any employees when making such determination except for our co-CEOs. For purposes of identifying the median employee, we estimated the following elements of compensation for each employee, which in the aggregate represents the consistently applied compensation measure that we used for our pay ratio determination:

- Base salary or base pay for fiscal 2021;
- Target annual cash incentive compensation for fiscal 2021; and
- Grant date fair value of equity awards granted in fiscal 2021.

We selected this consistently applied compensation measure because it reflects our primary compensation elements across the employee population. For purposes of identifying the median employee, any compensation paid in foreign currencies was converted to U.S. dollars based on the average of the monthly exchange rates for the twelve-month period ended October 30, 2021. In identifying the median employee, we did not make any cost-of-living adjustments in accordance with Item 402(u) of Regulation S-K.

A portion of our employee workforce identified above, including both full-time and part-time employees, worked for less than the full fiscal year due to commencing employment after the beginning of fiscal 2021 or taking an unpaid leave of absence during fiscal 2021. In determining the median employee, we annualized the total compensation of such individuals who were permanent employees based on reasonable assumptions and estimates relating to our employee compensation program.

The pay ratio reported above is a reasonable estimate calculated in a manner consistent with and utilizing SEC rules based on our internal records and the company-specific methodology described above. Therefore, the pay ratio reported by other companies may not be comparable to our reported pay ratio, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios.

Equity Compensation Plan Information

The following table provides information regarding our equity compensation plans as of October 30, 2021.

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	7,208 ⁽⁴⁾	\$ 111.34	26,942 ⁽⁵⁾
Equity Compensation Plans Not Approved by Stockholders ⁽⁶⁾	—	—	—
Total	7,208	111.34	26,942

⁽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) approximately 4.2 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 Directors Plan, and (b) approximately 3 million shares of common stock issuable upon exercise of outstanding stock options granted under the 2006 Employee Plan and the 2017 Directors Plan.

⁽⁵⁾ Comprised of (a) approximately 13.8 million shares remaining available for issuance under the 2006 Employee Plan, (b) approximately 0.4 million shares remaining available for issuance under the 2017 Directors Plan, and (c) approximately 12.8 million shares remaining available for issuance under the Employee Stock Purchase Plan as of October 30, 2021, including shares subject to purchase during the current offering period, which commenced on September 1, 2021 (the exact number of which will not be known until the purchase date on February 28, 2022).

⁽⁶⁾ Does not include approximately 0.1 million shares of common stock issuable upon exercise of outstanding stock options, with a weighted-average exercise price of \$33.57 per share, under various plans assumed in connection with acquisitions of other companies. No shares remain available for future issuance under these acquired plans.

AUDIT MATTERS

PROPOSAL 5

Ratification of Selection of Independent Registered Public Accounting Firm

✓ 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 2022.

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 2022. 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 2022.

We expect that KPMG LLP representatives will be present at the Annual Meeting, will have the opportunity to make a statement if they desire 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 having voting power present in person (virtually) or represented by proxy and voting on such matter at the Annual Meeting 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 Amended and Restated 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.

Fees and Service 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. 30, 2021 (in thousands)	Oct. 31, 2020 (in thousands)
Audit Fees ⁽¹⁾	\$ 5,218	\$ 4,850
Audit-Related Fees ⁽²⁾	—	—
Tax Fees ⁽³⁾	22	14
All Other Fees ⁽⁴⁾	113	13
TOTAL FEES	\$ 5,353	\$ 4,877

⁽¹⁾ Audit fees consist of fees for the audit of Synopsys' consolidated financial statements in our Annual Report on Form 10-K, review of Synopsys' interim condensed consolidated financial statements in each of our Quarterly Reports on Form 10-Q, and services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.

⁽²⁾ Audit-related fees consist of fees for assurance and related services that are reasonably related to the performance of the audit or review of Synopsys' consolidated financial statements and not reported under "Audit Fees." There were no audit-related fees in fiscal 2021 or 2020.

⁽³⁾ Tax fees consist of fees for professional services for tax compliance, tax advice and tax planning. This category includes fees primarily related to assistance with international tax compliance services pertaining to certain foreign subsidiaries.

⁽⁴⁾ All other fees consist of fees for a subscription to KPMG research software and due diligence services in connection with proposed investments.

Audit Committee Pre-Approval Policies and Procedures

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

Audit Committee Report*

As more fully described in its written charter, the Audit Committee acts on behalf of the Board of Directors 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 financial reporting, and disclosure controls, (6) the evaluation of risks associated with financial reporting, accounting, auditing and tax matters, and (7) the fulfillment of other responsibilities as prescribed by the Board of Directors. 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 2021, the Audit Committee was composed of three non-employee directors. Each member of the Audit Committee is considered independent under the applicable requirements of the SEC and the Nasdaq Listing Standards. In addition, the Board of Directors has determined that the current members of the Audit Committee, Ms. Johnson, Ms. Sargent, and Mr. Vallee each qualifies as an "audit committee financial expert" within the meaning of the regulations of the SEC.

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 of Directors-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 nine times during fiscal 2021. 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 SEC. 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 and insurance, 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 SEC and is not to be incorporated by reference into any of our other filings under the Securities Act or the Exchange Act, except to the extent we specifically incorporate this report by reference therein.

Communications with Management and Independent Registered Public Accounting Firm

The Audit Committee has reviewed and discussed our audited financial statements with management. In addition, the Audit Committee has discussed with KPMG LLP, Synopsys' independent registered public accounting firm, the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board (PCAOB) and the SEC. The Audit Committee has also received the written disclosures and letter from KPMG LLP required by applicable requirements of the PCAOB 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 of Directors that Synopsys' audited fiscal 2021 financial statements be included in our 2021 Annual Report on Form 10-K.

AUDIT COMMITTEE

Mercedes Johnson, Chair
Jeannine P. Sargent
Roy Vallee

STOCKHOLDER PROPOSAL

PROPOSAL 6

Shareholder Right to Act by Written Consent

✕ Our Board of Directors recommends that you vote **AGAINST** Proposal 6.

We received a stockholder proposal from John Chevedden of 2215 Nelson Avenue, No. 205, Redondo Beach, California 90278 (the Proponent), who beneficially owns 35 shares of our common stock. The Proponent has requested that we include the following proposal and supporting statement in this Proxy Statement for the Annual Meeting. The proposal may be voted on at the Annual Meeting only if properly presented by the Proponent or the Proponent's qualified representative at the Annual Meeting.

For the reasons set forth following the Proponent's proposal, our Board of Directors opposes adoption of the proposal and recommends that you vote **AGAINST** the proposal.

Proposal 6 – Shareholder Right to Act by Written Consent

Shareholders request that our board of directors undertake such steps as may be necessary to permit written consent by shareholders entitled to cast the minimum number of votes that would be necessary to authorize the action at a meeting at which all shareholders entitled to vote thereon were present and voting. This includes shareholder ability to initiate any appropriate topic for written consent. One shareholder shall be able to perform the ministerial function of asking for a record date.

Hundreds of major companies enable shareholder action by written consent. This proposal topic on majority shareholder support at 13 large companies in a single year. This included 67%-support at both Allstate and Sprint. This proposal topic also won 63%-support at Cigna Corp. in 2019. This proposal topic would have received higher votes than 63% to 67% at these companies if more shareholders had access to independent proxy voting advice.

It is important to adopt this proposal to help make up for the restricted right of Synopsys shareholders to call for a special shareholder meeting. A sizeable percentage of SNPS shares are excluded from participating in calling for a special shareholder meeting. All shares owed for less than one continuous year are 100% excluded from formal participation in calling for a special shareholder meeting.

It takes 20% of our shares outstanding to call for a special shareholder meeting and all shares held for less than one continuous year are excluded. Thus the owners of 20% of our shares held for one year could determine that they own 40% of our stock when the length of stock ownership is not included. Thus our 20% stock ownership threshold to call for a special shareholder meeting can translate into a 40% stock ownership threshold.

Plus the owners of Synopsys shares recently purchased can be the most informed shareholders on the opportunities and challenges for Synopsys. It does not make sense to exclude from the governance of our company the potentially most informed shareholders.

Taking action by written consent in place of a meeting is also a means shareholders can use to raise important matters outside the normal annual meeting cycle like the election of a new director. For instance the replacement of the director who received the most against votes. In 2021 Bruce Chizen received the most against votes by comfortable margin.

It is important to adopt this proposal to help make up for the restrictions on the right of Synopsys shareholders to call for a special shareholder meeting.

Please vote yes:

Shareholder Right to Act by Written Consent – Proposal 6

Proposal 6 – Stockholder Right to Act by Written Consent

Our Board of Directors Recommends that You Vote **AGAINST** Proposal 6.

Our Board of Directors unanimously recommends that stockholders vote **AGAINST** Proposal 6 because it is not in the best interests of stockholders and is unnecessary given Synopsys' strong corporate governance practices and accountability to stockholders, as described below.

Our existing special meeting right is an appropriate method for stockholders to implement change at Synopsys.

Our existing stockholders' right to request a special meeting is a very significant, year-round avenue for raising important matters with our Board of Directors. Our Board of Directors unanimously adopted this powerful right in 2020 in response to stockholder feedback as a part of its commitment to maintaining leading corporate governance practices, procedures and characteristics. Synopsys' bylaws permit stockholders that collectively own at least 20% or more of its stock for at least one year to request that a special meeting be held outside of the annual meeting. Our Board of Directors believe a special meeting is a more appropriate method to implement change at Synopsys because, among other reasons, special stockholder meetings ensure that proposals are widely disseminated to all stockholders through a proxy statement and additional soliciting materials, if any, which must contain information about the proposed action as specified by the SEC.

Proponent's proposal suggests that the 20% ownership threshold makes the special meeting right too difficult. Proponent's analysis appears to assume, however, that half of most stockholders' shares are held for less than one year. In fact, based on a review of publicly available information, including SEC Forms 13F from December 31, 2020 through December 31, 2021, we estimate that:

- As of December 31, 2021, approximately 89.7% of shares of Synopsys common stock outstanding were held by institutions; and
- Approximately 97.5% of those institutions had owned Synopsys stock for at least one year.

This publicly available ownership information reveals a stockholder base that is drastically different from what Proponent's hypothetical suggests. Our Board also believes that stockholders who have held shares for at least one year have shown an appreciation of and commitment to the long-term success of Synopsys and its efforts to create sustainable long-term value.

Our Board of Directors believes the right to call a special meeting together with reasonable stock ownership requirements provides stockholders with a meaningful ability to propose actions for stockholder consideration between annual meetings, without creating the risk that a small group of stockholders could use this mechanism for their own short-term or special interests without necessary procedural protections.

Proposal 6 lacks safeguards and provides a greater opportunity for abuse.

Our Board of Directors believes that Proposal 6, if adopted, could result in stockholders being denied the opportunity to receive necessary information about proposed actions and an opportunity to make informed decisions. Proposal 6 does not require that all stockholders receive a description of the proposed action or the reasons for it in time to allow those stockholders to consider the proposal. Nor does Proposal 6 require that our Board of Directors be given the opportunity to provide its views to stockholders about the proposed action. The proposal therefore may result in certain stockholders taking actions effectively in secret and without the involvement of other stockholders. Our Board of Directors believes that all stockholders, not just the simple majority necessary to approve an action by written consent, should have an opportunity to hear about and have time to consider any proposed action, informed by the views of the Board of Directors.

Proposal 6 would also allow subsets of stockholders, including short-term or special interest stockholders, to use the written consent procedure at any time and as frequently as they choose. Indeed, Proposal 6 would permit just one stockholder to initiate a written consent action, regardless of that stockholder's ownership percentage or duration of holding. Frequent, simultaneous or even contradictory proposals could create significant confusion and inefficiency for a widely held public company like Synopsys. This disordered state of corporate affairs would impose significant administrative and financial burdens on Synopsys, while providing little or no corresponding benefit to stockholders. Our Board of Directors believes there must be a balance between empowering stockholders to request action in appropriate circumstances and mitigating the risks described above, and that our special meeting right strikes that balance appropriately.

Our strong and evolving corporate governance practice promotes accountability.

The ability to act by written consent is also unnecessary because our Board of Directors has demonstrated a long-standing commitment to strong corporate governance principles that promote stockholder rights and accountability. By responding to and implementing emerging governance best practices over the years, Synopsys maintains leading governance policies, procedures and characteristics, which reduce the need for stockholders to act by written consent, including the right to call a special meeting described above, as well as:

- The annual election of all directors;
- A majority voting standard in uncontested director elections with advanced conditional resignation for failing to meet such majority vote;
- Stockholder ability to remove directors, with or without cause;
- No supermajority voting provisions;
- No stockholder rights plan or “poison pill;”
- Single class of common stock structure; and
- Robust outreach and engagement with stockholders on corporate governance, including our Corporate Social Responsibility efforts.

In summary, our Board of Directors believes that Synopsys’ existing special meeting right is an appropriate method for stockholders to implement change at Synopsys. Proposal 6 lacks the necessary procedural safeguards to protect our stockholders from the abuses of short-term or special interest stockholders, has the potential to disenfranchise certain stockholders, and could create confusion and significant administrative and financial burdens for Synopsys. Our Board of Directors also remains committed to providing our stockholders with strong corporate governance practices, including a robust set of stockholder rights, active stockholder engagement, and a demonstrated responsiveness to stockholders. Our existing right to call a special meeting along with these corporate governance practices allow our Board of Directors to oversee Synopsys’ business, affairs and long-term strategies and goals for the benefit of all stockholders while avoiding the governance risks associated with Proposal 6 and the right to act by written consent. **For these reasons, we believe Proposal 6 is not in the best interest of Synopsys stockholders nor necessary and recommend you vote AGAINST Proposal 6.**

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of February 11, 2022 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	17,070,637	11.2 %	Based solely on the Schedule 13G/A filed with the SEC on February 10, 2022, reporting beneficial ownership as of December 31, 2021. The Vanguard Group, Inc. has sole dispositive power with respect to 16,446,054 shares, shared dispositive power with respect to 624,583 shares, sole voting power with respect to 0 shares and shared voting power with respect to 251,715 shares.
Entities associated with BlackRock, Inc. 55 E. 52nd Street New York, NY 10055	13,116,235	8.6 %	Based solely on the Schedule 13G/A filed with the SEC on February 1, 2022, reporting beneficial ownership as of December 31, 2021. BlackRock, Inc. has sole dispositive power with respect to 13,116,235 shares and sole voting power with respect to 11,501,067 shares.
Entities associated with T. Rowe Price Associates, Inc. 100 E. Pratt Street Baltimore, MD 21202	9,737,325	6.4 %	Based solely on the Schedule 13G/A filed with the SEC on February 14, 2022, reporting beneficial ownership as of December 31, 2021. T. Rowe Price Associates, Inc. has sole dispositive power with respect to 9,737,325 shares and sole voting power with respect to 4,075,800 shares.
Janice D. Chaffin Director	13,295	*	* Includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
Chi-Foon Chan Co-Chief Executive Officer and Director	318,827	*	* Includes stock options to purchase 151,174 shares exercisable by Dr. Chan within 60 days following February 11, 2022.
Bruce R. Chizen Director	13,835	*	* Includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
Aart J. de Geus Co-Chief Executive Officer and Chairman of the Board of Directors	661,178	*	* Includes stock options to purchase 256,908 shares exercisable by Dr. de Geus within 60 days following February 11, 2022. Also includes 14,500 shares owned by Mora Investment Partners L.P.
Sassine Ghazi President and Chief Operating	202,928	*	* Includes stock options to purchase 157,792 shares exercisable by Mr. Ghazi within 60 days following February 11, 2022.
Mercedes Johnson Director	15,516	*	* Includes stock options to purchase 7,500 shares exercisable by Ms. Johnson within 60 days following February 11, 2022. Also includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
Joseph W. Logan Chief Revenue Officer	306,063	*	* Includes stock options to purchase 206,239 shares exercisable by Mr. Logan within 60 days following February 11, 2022.
Chrysostomos L. "Max" Nikias Director	23,232	*	* Includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
Trac Pham Chief Financial Officer	132,239	*	* Includes stock options to purchase 74,072 shares exercisable by Mr. Pham within 60 days following February 11, 2022.

Name of Beneficial Owner ⁽¹⁾	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Shares ⁽²⁾	Additional Information
John F. Runkel, Jr. General Counsel and Corporate Secretary	26,329	*	Includes stock options to purchase 3,463 shares exercisable by Mr. Runkel within 60 days following February 11, 2022.
Jeannine P. Sargent Director	5,113	*	Includes stock options to purchase 3,998 shares exercisable by Ms. Sargent within 60 days following February 11, 2022. Also includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
John G. Schwarz Director	10,913	*	Includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.
Roy Vallee Director	40,239	*	Includes 670 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture. Also includes 30,000 shares owned by RCV Holdings LLP.
All directors and executive officers as a group (13 persons)	1,769,707	1.2 %	Includes stock options to purchase 861,146 shares exercisable by all directors and executive officers within 60 days following February 11, 2022. Also includes 4,690 shares of restricted stock that are not vested as of February 11, 2022 and are subject to forfeiture.

* Less than 1%

⁽¹⁾ Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as indicated 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 SEC, 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 11, 2022.

⁽²⁾ Percentage of beneficial ownership is based on 153,097,613 shares of common stock outstanding as of February 11, 2022, adjusted as required by SEC 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 11, 2022, 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.

ADDITIONAL INFORMATION

About the Annual Meeting

Information about our Annual Meeting

Why is the meeting conducted in a virtual meeting format?

Due to the continued public health impact of COVID-19 and to support the health and well-being of our attendees, our Board of Directors has decided to hold a virtual Annual Meeting via live webcast. There will not be a physical location for the Annual Meeting.

We have tried to design the virtual Annual Meeting to provide substantially the same opportunities to participate as you would have at an in-person meeting. Stockholders will be able to attend and participate online and submit questions during the Annual Meeting by visiting www.virtualshareholdermeeting.com/SNPS2022.

How do I attend and participate in the virtual Annual Meeting?

To attend and participate in the Annual Meeting, you will need the 16-digit control number included on your Notice of Internet Availability of Proxy Materials, proxy card, or voting instruction form. The Annual Meeting will begin at 8:00 a.m. Pacific Time. We encourage you to access the Annual Meeting prior to the start time. Online access will begin at 7:45 a.m. Pacific Time.

The virtual Annual Meeting platform is fully supported across browsers and devices running the most updated version of applicable software and plugins. Stockholders should ensure that they have a strong internet connection if they intend to attend and/or participate in the Annual Meeting. Attendees should allow plenty of time to log in and ensure that they can hear streaming audio prior to the start of the Annual Meeting.

If you encounter any difficulties accessing the virtual Annual Meeting during the check-in or meeting time, please call the technical support number that will be posted on the virtual meeting login page for assistance. Technical support will be available beginning at 7:45 a.m. Pacific Time on April 12, 2022 through the conclusion of the Annual Meeting.

Information about our Proxy Materials

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 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 2021 Annual Report on Form 10-K will be distributed and made available on or about February 23, 2022.

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 SEC 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.

Information about our Proposals

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 of Directors' voting recommendations are set forth in the table below.

Proposal	Board of Directors' Voting Recommendation
1. To elect eight directors nominated by our Board of Directors to hold office until the next annual meeting of stockholders and until their successors have been elected	FOR each director nominee
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 our Employee Stock Purchase Plan, as amended, in order to, among other items, increase the number of shares available for issuance under the plan by 2,000,000 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 October 29, 2022	FOR
6. To vote on the stockholder proposal that permits stockholder action by written consent, if properly presented at the meeting	AGAINST

We will also consider any other business that properly comes before the Annual Meeting or any adjournment or postponement thereof. 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.

How is a director nominee elected to the Board of Directors?

Provided that there is a quorum at the Annual Meeting, a director nominee will be elected if the votes "For" the nominee exceed 50% of the number of votes cast on the issue of that nominee's election (including votes "For" and votes "Against" with respect to that nominee's election, but excluding any abstentions or broker non-votes).

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 of Directors to fill the vacancy. As of the date of this Proxy Statement, our Board of Directors is not aware of any nominee who is unable or intends to 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 their successor is elected and qualified or, if earlier, the director's death, resignation or removal.

You may either vote "For," "Against," or "Abstain" for any nominee you specify. Unless marked otherwise, proxies returned to us will be voted "For" each of the nominees named below. Broker non-votes and abstentions will have no effect on the vote for the election of directors (Proposal 1). Therefore, 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 such that your vote can be counted for Proposal 1.

Proposal 1 is an uncontested election. In addition to the voting requirements described above and further outlined in our Amended and Restated Bylaws (Bylaws), our Corporate Governance Guidelines provide that our Board of Directors will only nominate for election or re-election candidates who tender, prior to such nomination, an irrevocable resignation that will be effective upon (1) the failure to receive the required majority vote at a meeting at which they stand for election and (2) our Board of Directors' acceptance of such resignation at the Board's exclusive discretion. Synopsys will publicly disclose the decision reached by our Board of Directors and the reasons for such decision.

Information about Voting

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 11, 2022, 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, 153,097,613 shares of our common stock were issued and outstanding and entitled to vote. You are entitled to one vote for each share of common stock you held on the Record Date. A list of registered stockholders entitled to vote at the meeting will be available during the meeting by following the instructions located at www.virtualshareholdermeeting.com/SNPS2022. The names of stockholders of record entitled to vote at the Annual Meeting will be available to stockholders entitled to vote for ten days prior to the Annual Meeting for any purpose relevant to the Annual Meeting. If you want to inspect this list, email our Investor Relations department at synopsys-ir@synopsys.com.

Whether or not you plan to attend the Annual Meeting, we urge you to vote by 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, 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 (virtually).** If you are a stockholder of record, you may vote in person (virtually) at the Annual Meeting using your 16-digit control number provided in the proxy card or Notice of Availability of Proxy Materials.
- **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 to be sent via mail through 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.

The deadline for voting by Internet or phone is 11:59 p.m. Eastern Time on Monday, April 11, 2022. Whether or not you plan to attend the Annual 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 (virtually).** If you are a beneficial owner and you wish to vote in person (virtually) at the Annual Meeting, you may vote using your 16-digit control number provided in the voting instruction form or Notice of Availability of Proxy Materials, or you will need to follow the instructions provided by your broker, bank, trustee or nominee.
- **Via the Internet.** You may vote by proxy via the Internet by following the instructions provided in the voting instruction form or Notice of Availability of Proxy Materials.
- **By Telephone.** If you received printed copies of the proxy materials, you may vote by proxy by calling the toll free number found on the voting instruction form. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy over the telephone, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then calling the toll free number found on the voting instruction form.
- **By Mail.** If you received printed copies of the proxy materials, you may vote by proxy by filling out the voting instruction form and sending it back in the envelope provided. If you only received a Notice of Availability of Proxy Materials and wish to vote by proxy via mail, you may do so by first requesting printed copies of the proxy materials by mail by following the instructions in the Notice of Availability of Proxy Materials and then filling out the voting instruction form and sending it back in the envelope provided.

The deadline for voting by Internet or phone is 11:59 p.m. Eastern Time on Monday, April 11, 2022. As a beneficial owner, you are also invited to attend (virtually) the Annual Meeting.

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. Under applicable state law, 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.

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 principal executive offices at 690 East Middlefield Road, Mountain View, California 94043 (Corporate Headquarters), 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 (virtually) the Annual Meeting and voting during the meeting.

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 (virtually) 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.

What votes can I cast for the proposals?

- **Proposal 1.** You may either vote "For" or "Against," or "Abstain" for any nominee you specify. An abstention will not be counted as either a vote cast "For" or "Against."
- **Proposals 2, 3, 4, 5 and 6.** You may vote "For" or "Against," or "Abstain" from voting. An abstention will not be counted as either a vote cast "For" or "Against."

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 2022 (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 our Employee Stock Purchase Plan, as amended (Proposal 3), the advisory vote on the compensation of our named executive officers (Proposal 4), and the stockholder proposal regarding stockholder action by written consent (Proposal 6) are matters considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposals 1, 2, 3, 4 and 6. A broker non-vote will have no effect on these proposals.

Other Information

Who is paying for this solicitation?

Synopsis 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 householed. 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, 2021 Annual Report on Form 10-K or Notice of Availability of Proxy Materials, please notify your broker and our Investor Relations department in writing by email at invest-info@synopsys.com or mail sent to our Corporate Headquarters, attention Investor Relations. 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 2021 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 30, 2021, as filed with the SEC on December 13, 2021 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 2021 Annual Report on Form 10-K is not incorporated into this Proxy Statement and should not be considered proxy solicitation material.

Where can I find the voting results of the meeting?

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 SEC within four business days after the Annual Meeting.

Stockholder Information

Stockholder Communications, Nominations and Proposals

How do I communicate with the Board of Directors?

Stockholders who wish to communicate with our Board of Directors or one or more individual members of our Board of Directors may do so by sending written communications addressed to our Corporate Headquarters, attention Corporate Secretary.

Stockholder communications related to corporate governance and other Board matters received at this address that are addressed to our Board of Directors will be compiled by our Corporate Secretary and forwarded to the specified director, 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, as appropriate.

When are stockholder proposals due for inclusion in the proxy materials for our next annual meeting?

To be considered for inclusion in the proxy materials for next year's annual meeting of stockholders under Rule 14a-8 of the Exchange Act, your proposal must be submitted in writing by October 26, 2022 to our Corporate Headquarters, attention Corporate Secretary, and must comply with all applicable requirements of Rule 14a-8 of the Exchange Act.

How can I present director nominees or stockholder proposals to be voted on at next year's annual meeting of stockholders under the advance notice provisions of our bylaws?

Our Bylaws include separate advance notice provisions applicable to stockholders desiring to bring nominations for directors or proposals before an annual meeting of stockholders (other than pursuant to Rule 14a-8 of the Exchange Act). These advance notice provisions require that, among other things, stockholders submit a timely written notice to our Corporate Headquarters, attention Corporate Secretary, regarding such nominations or proposals and provide the information and satisfy the other requirements set forth in the Bylaws.

To be timely, a stockholder who intends to present nominations or a proposal (other than pursuant to Rule 14a-8 of the Exchange Act) at the 2023 Annual Meeting of Stockholders must provide the information set forth in the Bylaws to our Corporate Secretary not earlier than the close of business on September 26, 2022 and not later than the close of business on October 26, 2022. Our Bylaws contain different notice submission date requirements in the event our annual meeting is held more than 30 days before or after April 12, 2022.

In addition to satisfying the foregoing requirements under the Bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than Synopsys' nominees must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than February 11, 2023.

We reserve the right to reject, rule out of order, or take other appropriate action with respect to any nomination or proposal that does not comply with these and other applicable requirements.

Other Matters

We know of no other business that will be presented at the Annual Meeting. If any other business is properly brought before the Annual Meeting or any adjournment or postponement thereof, 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
February 23, 2022

A copy of our 2021 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 12, 2022

The Proxy Statement and our 2021 Annual Report on Form 10-K will be available to stockholders at
<http://www.proxyvote.com> on or about February 23, 2022.

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 19, 2022
AMENDMENT TO BE APPROVED BY THE STOCKHOLDERS: APRIL 12, 2022
TERMINATION DATE: APRIL 1, 2026

1. GENERAL.

(a) **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.

(b) **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.

(c) **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(a), to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Stock Awards.

2. DEFINITIONS.

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

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

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

(c) **"Board"** means the Board of Directors of the Company.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(l) **"Continuous Service"** means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. For example, a change in the capacity in which the Participant renders service to the Company or an Affiliate from a Consultant to Employee or vice versa 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) **"Director"** means a member of the Board.

(o) **"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.

(p) **"Effective Date"** means April 25, 2006, the first date that the Company's stockholders approved the Plan at the 2006 Annual Meeting of Stockholders.

(q) **"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.

(r) **"Entity"** means a corporation, partnership or other entity.

(s) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.

(t) **"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.

(u) **"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.

(v) **"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.

(w) **"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.

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

(y) **"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.

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

(aa) **"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.

(bb) **"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.

(cc) **"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).

(dd) **"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.

(ee) **"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.

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

(gg) **"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.

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

(ii) **"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 metrics; (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; (xxviii) customer satisfaction; (xxix) stockholders' equity; (xxx) quality measures; (xxxi) Non-GAAP net income; (xxxii) workforce metrics such as diversity, employee turnover, retention and engagement, and leadership; and (xxxiii) any other measures of performance selected by the Board. Unless the Board provides otherwise, 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; and (6) 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.

(jj) **"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. 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 (including but not limited to various income tax impacts prompted by tax reform legislation adopted in late 2017 (commonly referred to as the Tax Cut and Jobs Act of 2017), including the income tax related to transition tax, the tax rate change, and tax restructuring; and the tax impact of repatriation); (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; (xv) to exclude the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes; and (xvi) pursuant to such other objective and non-discretionary adjustments adopted by the Committee at the time the award is approved. The Board also retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals.

(kk) **"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.

(ll) **"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).

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

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

(oo) **"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.

(pp) **"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).

(qq) **"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.

(rr) **"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.

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

(tt) **"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).

(uu) **"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.

(vv) **"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.

(ww) **"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.

(xx) **"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%).

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

3. ADMINISTRATION.

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

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

(i) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

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

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

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

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

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

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

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

(c) Delegation To Committee.

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

(ii) **Section 162(m) and Rule 16b-3 Compliance.** In the sole discretion of the Board, the Committee may consist solely of two or more Outside Directors, in accordance with Section 162(m) of the Code to the extent that the Board determines it to be desirable to qualify Awards that were granted hereunder prior to April 8, 2019 as "performance-based compensation" within the meaning of Section 162(m) of the Code, and/or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. In addition, subject to applicable law, the Board or the Committee, in its sole discretion, may delegate to a committee of one or more members of the Board the authority to grant 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(u)(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 One Hundred Five Million Nine Hundred Ninety Seven Thousand Two Hundred Forty Eight (105,997,248) shares of Common Stock in the aggregate. Subject to Section 4(b), the number of shares available for issuance under the Plan shall be reduced by: (i) one (1) share for each share of stock issued pursuant to (A) an Option granted under Section 6, or (B) a Stock Appreciation Right granted under Section 7(c), and (ii) (A) one and thirty-six hundredths (1.36) shares for each share of Common Stock issued prior to February 27, 2009 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (B) two and eighteen hundredths (2.18) shares for each share of Common Stock issued on or after February 27, 2009 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (C) one and twenty-five hundredths (1.25) shares for each share of Common Stock issued on or after March 24, 2011 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (D) one and five tenths (1.50) shares for each share of Common Stock issued on or after April 3, 2012 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, (E) one and six tenths (1.60) shares for each share of Common Stock issued on or after April 2, 2015 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7, and (F) one and seven tenths (1.70) shares for each share of Common Stock issued on or after March 29, 2016 pursuant to a Restricted Stock Award, Restricted Stock Unit Award, or Other Stock Award granted under Section 7. Shares may be issued in connection with a merger or acquisition as permitted by Nasdaq Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, or other applicable rule, and such issuance shall not reduce the number of shares available for issuance under the Plan.

(b) Reversion of Shares to the Share Reserve.

(i) **Shares Available For Subsequent Issuance.** If any (i) Stock Award shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, (ii) shares of Common Stock issued to a Participant pursuant to a Stock Award are forfeited to or repurchased by the Company at their original exercise or purchase price (if any) pursuant to the Company's reacquisition or repurchase rights under the Plan, including any forfeiture or repurchase caused by the failure to meet a contingency or condition required for the vesting of such shares, or (iii) Stock Award is settled in cash, then the shares of Common Stock not issued under such Stock Award, or forfeited to or repurchased by the Company, shall revert to and again become available for issuance under the Plan. To the extent there is issued a share of Common Stock pursuant to a Stock Award that counted as either (A) one and thirty-six hundredths (1.36) shares, (B) two and eighteen hundredths (2.18) shares, (C) one and twenty-five hundredths (1.25) shares, (D) one and five tenths (1.50) shares, (E) one and six tenths (1.60) shares, or (F) one and seven tenths (1.70) shares, as applicable, against the number of shares available for issuance under the Plan pursuant to Section 4(a) and such share of Common Stock again becomes available for issuance under the Plan pursuant to this Section 4(b)(i) on or after March 29, 2016, then the number of shares of Common Stock available for issuance under the Plan shall increase by one and seven tenths (1.70) shares (regardless of when such share was issued).

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

(c) **Incentive Stock Option Limit.** Notwithstanding anything to the contrary in this Section 4, subject to the provisions of Section 9(a) relating to Capitalization Adjustments the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options shall be the number of shares of Common Stock set forth in Section 4(a) above.

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

5. ELIGIBILITY.

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

(b) **Ten Percent Stockholders.** An Employee who is also a Ten Percent Stockholder shall not be granted an Incentive Stock Option unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of the Common Stock on the date of grant and the Option has a term of no more than five (5) years from the date of grant and is not exercisable after the expiration of five (5) years from the date of grant.

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

6. OPTION PROVISIONS.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS.

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

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

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

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

(iv) **Transferability.** Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement shall be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board shall determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement and provided that in no event may any Restricted Stock Award be transferred for consideration to a third-party financial institution.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) Performance Awards.

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

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

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

8. MISCELLANEOUS.

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

(b) **Stockholder Rights.** No Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Stock Award unless and until such Participant has satisfied all requirements for exercise of, or the issuance of shares under, the Stock Award pursuant to its terms and the issuance of the Common Stock has been entered into the books and records of the Company. As determined by the Board, dividends and dividend equivalent rights may accrue with respect to Awards other than Options or Stock Appreciation Rights granted under this Plan, but no dividends or dividend equivalents shall be paid out or settled unless and until, and then only to the extent that, the applicable underlying Award vests. For the avoidance of doubt, neither Options nor Stock Appreciation Rights granted under this Plan may provide for any dividends or dividend equivalents thereon.

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

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

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

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

(g) **Withholding Obligations.** Unless prohibited by the terms of a Stock Award Agreement or the written terms of a Performance Cash Award, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with a Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the 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. The Fair Market Value of any shares of Common Stock to be withheld will be determined based on such methodology that the Company deems to be reasonable and in accordance with applicable law.

(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.

(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.

(n) **Other Policies.** Each Award may be subject to the terms and conditions of any policy (and any amendments thereto) adopted by the Company from time to time, which may include any policy related to the vesting or transfer of Awards, provided that in no event will such policy permit that an Award be transferred for consideration to a third-party financial institution. Whether any such policy will apply to a particular Award may depend, among other things, on when the Award was granted, whom the Award was granted to, and the type of Award.

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. In addition, for each Option or Stock Appreciation Right with an exercise price or strike price, respectively, greater than the consideration offered in connection with any Capitalization Adjustment, Change in Control or Corporate Transaction, the Board may in its discretion elect to cancel such Option or Stock Appreciation Right without any payment to the person holding such Option or Stock Appreciation Right. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. The conversion of any convertible securities of the Company shall not be treated as a transaction “without receipt of consideration” by the Company.

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

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

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

(ii) **Stock Awards Held by Current Participants.** In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue any or all outstanding Stock Awards or substitute similar stock awards for such outstanding Stock Awards, then with respect to Stock Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the “*Current Participants*”), the vesting of such Stock Awards (and, if applicable, the time at which such Stock Awards may be exercised) shall (contingent upon the effectiveness of the Corporate Transaction) be accelerated in full to a date prior to the effective time of such Corporate Transaction as the Board shall determine (or, if the Board shall not determine such a date, to the date that is five (5) days prior to the effective time of the Corporate Transaction), and such Stock Awards shall terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Stock Awards shall lapse (contingent upon the effectiveness of the Corporate Transaction). No vested Restricted Stock Unit Award shall terminate pursuant to this Section 9(c)(ii) without being settled by delivery of shares of Common Stock, their cash equivalent, any combination thereof, or in any other form of consideration, as determined by the Board, prior to the effective time of the Corporate Transaction (or such later date in accordance with a deferral election as described in Section 8(i)).

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

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

(d) **Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant. A Stock Award may vest as to all or any portion of the shares subject to the Stock Award (i) immediately upon the occurrence of a Change in Control, whether or not such Stock Award is assumed, continued, or substituted by a surviving or acquiring entity in the Change in Control, or (ii) in the event a Participant's Continuous Service is terminated, actually or constructively, within a designated period prior to, at, or following the occurrence of a Change in Control. In the absence of a determination by the Board, 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. For the avoidance of doubt, no Awards granted under the Plan on or after April 8, 2019 will be designed or intended to be "performance-based compensation" under Section 162(m) of the Code, and the terms and conditions of this Plan as amended and restated as of such date shall not apply to or otherwise impact outstanding Awards granted prior to such date under the Plan.

(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, but all Awards made prior to such time will continue in effect after such suspension or termination subject to the terms thereof and of this Plan.

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

12. EFFECTIVE DATE OF PLAN.

The Plan first became effective on the Effective Date.

13. CHOICE OF LAW.

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

SYNOPSYS, INC. EMPLOYEE STOCK PURCHASE PLAN

(As amended by approval of the Board of Directors on January 19, 2022
and to be approved by the stockholders on April 12, 2022)

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 U.S. 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 Exchange Act, 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 Code Sections 424(e) and (f), respectively, 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 19, 2022, 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 for purposes of Code Section 423 in the records of the Company or a Corporate Affiliate. A Participant shall be deemed to have ceased to be an Employee either upon an actual termination of employment or upon the Corporate Affiliate employing the Participant ceasing to be a Participating Company. For purposes of the Plan, a Participant shall not be deemed to have ceased to be an Employee while on any military leave, sick leave, or other bona fide leave of absence approved by the Company, to the extent permitted by Treasury Regulation Section 1.421-1(h). 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.

Exchange Act means the U.S. Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

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.

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.

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 Period means each period for which the Participant actually participates in an 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 U.S. 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 of the Exchange Act, 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, revert in the Board some or all of the powers previously delegated to the Plan Administrator. Subject to the provisions of the Plan, the Board shall determine all of the relevant terms and conditions of Purchase Rights; provided, however, that all Participants granted Purchase Rights pursuant to an Offering shall have the same rights and privileges within the meaning of Code Section 423(b)(5).

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 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.

D. Without regard to whether any Participant's Purchase Right may be considered adversely affected, the Company may, from time to time, consistent with the Plan and the requirements of Code Section 423, establish, change or terminate such rules, guidelines, policies, procedures, limitations, or adjustments as deemed advisable by the Company, in its discretion, for the proper administration of the Plan, including, without limitation, (i) a minimum payroll deduction amount required for participation in an Offering, (ii) a limitation on the frequency or number of changes permitted in the rate of payroll deduction during an Offering, (iii) an exchange ratio applicable to amounts withheld or paid in a currency other than United States dollars, (iv) a payroll deduction greater than or less than the amount designated by a Participant in order to adjust for the Company's delay or mistake in processing an enrollment agreement or in otherwise effecting a Participant's election under the Plan or as advisable to comply with the requirements of Code Section 423, and (v) determination of the date and manner by which the Fair Market Value of a share of Common Stock is determined for purposes of administration of the Plan. All such actions by the Company shall be taken consistent with the requirements under Code Section 423(b)(5) that all Participants granted Purchase Rights pursuant to an Offering shall have the same rights and privileges within the meaning of such section, except as otherwise permitted by Section III(E) and the regulations under Code Section 423.

E. The Board shall have the power, in its discretion, to adopt one or more sub-plans of the Plan as the Board deems necessary or desirable to comply with the laws or regulations, tax policy, accounting principles or custom of foreign jurisdictions applicable to employees of a subsidiary business entity of the Company, provided that any such sub-plan shall not be within the scope of an "employee stock purchase plan" within the meaning of Code Section 423. Any of the provisions of any such sub-plan may supersede the provisions of this Plan, other than Section VI. Except as superseded by the provisions of a sub-plan, the provisions of this Plan shall govern such sub-plan. Alternatively and in order to comply with the laws of a foreign jurisdiction, the Board shall have the power, in its discretion, to grant Purchase Rights in an Offering to citizens or residents of a non-U.S. jurisdiction (without regard to whether they are also citizens of the

United States or resident aliens) that provide terms which are less favorable than the terms of Purchase Rights granted under the same Offering to Employees resident in the United States.

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 after giving effect to such purchase on the applicable Purchase Date, (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, and (iii) all contribution amounts not applied to the purchase of shares of Common Stock after giving effect to such purchase on the applicable Purchase Date shall be refunded to the applicable Participants.

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 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 57,700,000 shares, all of which may be issued pursuant to Code Section 423 Purchase Rights. 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 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 and the Plan is in material compliance with all applicable U.S. federal, state, and foreign securities laws, exchange control laws 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 Purchase Period. 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 (unless otherwise required by applicable law). 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 payment by cash or check (after conversion into U.S. Dollars, if necessary) 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 Purchase Period, 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 Purchase Period 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 Purchase Period 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, unless otherwise determined by the Plan Administrator.

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,

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 Purchase Period 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 U.S. 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 without interest (unless otherwise required by applicable law).

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.

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.



SYNOPSYS, INC.
690 EAST MIDDLEFIELD ROAD
MOUNTAIN VIEW, CA 94043
ATTN: ERIKA VARGA MCENROE



SCAN TO
VIEW MATERIALS & VOTE



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on April 11, 2022. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/SNPS2022

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time on April 11, 2022. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717, so that it is received no later than April 11, 2022.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

D67931-P65704

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

SYNOPSYS, INC.

The Board of Directors recommends that you vote FOR all nominees set forth below:

1. Election of Directors

Nominees:

1a. Aart J. de Geus

For Against Abstain

☐ ☐ ☐

1b. Janice D. Chaffin

☐ ☐ ☐

1c. Bruce R. Chizen

☐ ☐ ☐

1d. Mercedes Johnson

☐ ☐ ☐

1e. Chrysostomos L. "Max" Nikias

☐ ☐ ☐

1f. Jeannine P. Sargent

☐ ☐ ☐

1g. John G. Schwarz

☐ ☐ ☐

1h. Roy Vallee

☐ ☐ ☐

The Board of Directors recommends you vote FOR proposals 2, 3, 4 and 5.

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 our Employee Stock Purchase Plan, as amended, in order to, among other items, increase the number of shares available for issuance under the plan by 2,000,000 shares.

☐ ☐ ☐

4. To approve, on an advisory basis, the compensation of our named executive officers, as disclosed in the Proxy Statement.

For Against Abstain

☐ ☐ ☐

5. To ratify the selection of KPMG LLP as our independent registered public accounting firm for the fiscal year ending October 29, 2022.

☐ ☐ ☐

The Board of Directors recommends you vote AGAINST proposal 6.

For Against Abstain

6. To vote on a stockholder proposal that permits stockholder action by written consent, if properly presented at the meeting.

☐ ☐ ☐

UNLESS OTHERWISE SPECIFIED ABOVE, THE SHARES WILL BE VOTED "FOR" ITEMS 1, 2, 3, 4 AND 5 AND "AGAINST" ITEM 6.

NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting of Stockholders.

NOTE: The last instruction received in either paper or electronic form prior to the deadline will be the instruction included in the final tabulation.

This Form of Proxy will be voted as specified by the undersigned. If no choice is indicated, the shares will be voted as the Board of Directors recommends. On other matters that come before the annual meeting, and any adjournments or postponements thereof, the proxies are authorized to vote in their discretion.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX] Date

Signature (Joint Owners) Date

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of
Stockholders to Be Held on April 12, 2022:**

The Notice and Proxy Statement and 2021 Annual Report on Form 10-K are available at www.proxyvote.com.

D67932-P65704

**SYNOPSYS, INC.
ANNUAL MEETING OF STOCKHOLDERS
APRIL 12, 2022**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

**Address changes and comments can be directed to Synopsys's Investor Relations Department
at synopsys-ir@synopsys.com**

The stockholder(s) hereby appoint(s) Trac Pham and John F. Runkel, Jr., or either of them, as proxies of the stockholder(s), each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this proxy card, all of the shares of common stock of Synopsys, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders of Synopsys, Inc. to be held on April 12, 2022 at 8:00 a.m. Pacific Time, and at any postponement or adjournment thereof. In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting of Stockholders.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ALL NOMINEES LISTED IN PROPOSAL 1, "FOR" PROPOSALS 2, 3, 4 AND 5, AND "AGAINST" PROPOSAL 6. This proxy when properly executed will be voted in the manner directed. If no such directions are specified, this proxy will be voted "FOR" each of the nominees listed in Proposal 1, "FOR" Proposals 2, 3, 4 and 5, and "AGAINST" Proposal 6.

Please mark, sign, date and return this proxy card using the enclosed envelope.

Continued and to be signed on reverse side



Learn more at
www.synopsys.com