Forward-Looking Statements

This presentation contains forward-looking statements including, but not limited to, statements regarding Synopsys’ short-term and long-term financial targets, expectations and objectives; business outlook, opportunities and strategies; customer demand and market expansion; strategies related to our products and technology; our planned product releases and capabilities; industry growth rates; software trends; planned acquisitions and buybacks; our expected tax rate; the expected impact of U.S. and foreign government action on our results; and the continued impact of the COVID-19 pandemic. These statements involve risks, uncertainties and other factors that could cause our actual results, time frames or achievements to differ materially from those expressed or implied in our forward-looking statements. Such risks, uncertainties and factors include, but are not limited to: risks from the continued effect of the COVID-19 pandemic on the global economy and on our business, operations and financial condition; uncertainty in the growth of the semiconductor and electronics industries; consolidation among our customers and our dependence on a relatively small number of large customers; risks and compliance obligations relating to the global nature of our operations as well as actions by the U.S. or foreign governments, such as measures in response to the COVID-19 pandemic or the imposition of additional tariffs or export restrictions; macroeconomic conditions and uncertainty in the global economy; fluctuation of our operating results; increased variability in our revenue due to the adoption of ASC 606, including the resulting increase in recognizing upfront revenue as a percentage of total revenue; and more. Additional information on potential risks, uncertainties and other factors that could affect Synopsys’ results is included in filings it makes with the Securities and Exchange Commission from time to time, including in the sections entitled “Risk Factors” in its Annual Report on Form 10-K for the fiscal year ended October 31, 2020, and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of August 18, 2021. Synopsys undertakes no duty, and does not intend, to update any forward-looking statement, whether as a result of new information, future events or otherwise, unless required by law.

Regulation G

In addition to financial results prepared in accordance with Generally Accepted Accounting Principles, or GAAP, this presentation will also contain certain non-GAAP financial measures. Except for certain forward-looking non-GAAP financial measures for which a reconciliation is not possible without unreasonable efforts, reconciliations of the non-GAAP financial measures contained in this presentation or given verbally to their most comparable GAAP measures are included in the table at the end of this presentation, along with the third quarter of fiscal year 2021 earnings release and financial supplement, dated August 18, 2021, and available on Synopsys’ website at https://www.synopsys.com/company/investor-relations/financial-news.html.
## Synopsys: The Market & Technology Leader

### Broad Product Portfolio

| Electronic Design Automation (EDA) | Semiconductor Intellectual Property (IP) | Software Security and Quality |

### FY20 | FY21 Targets\(^{(1)}\)
--- | --- | --- |
Revenue: | $3.685B | $4.19B - $4.22B |
Growth Rate: | 9.7% | 14% - 15% |
Non-GAAP Operating Margin: | 28% | ~30.5% (midpt) |
Non-GAAP EPS: | $5.55 | $6.78 - $6.83 |
Growth Rate: | 21.7% | 22% - 23% |
Operating Cash Flow: | $991M | ~$1.35B |
Business Model: | Time-based, recurring revenue model 2.5-3 years contract duration in FY21 |

\(^{(1)}\) These targets were provided by Synopsys as of August 18, 2021, and are not being updated at this time; a GAAP to non-GAAP reconciliation of FY21 Operating Margin targets and FY21 EPS targets are included at the end of this presentation.
Synopsys: The Market & Technology Leader

Electronic Design Automation

~35 years of investment and execution
~65% of revenue

Market Leader

Semiconductor IP

>20 years
~25% of revenue

#2 IP Vendor

Software Integrity

~7 years
~10% of revenue

Emerging Leader, Broadest Portfolio
Long-Term Financial Objectives¹

Rule of 40
• Revenue growth + non-GAAP operating margin
  • Objective set in Q2 2019
  • Fiscal 2021 targets – successfully reaching and surpassing this objective (>4B revenue + ~30.5% OM)¹

Rule of 45
• Q1 2021 – raised our long-term objective to manage to a Rule of 45 over time
• Combination of solid revenue growth + continuing operating margin expansion

Updated Financial Objectives – August 2021
• Expect to cross $5B in revenue by 2023 with double-digit annual revenue growth, and continued operating margin expansion¹
  • Details to be provided with Q4 2021 earnings report

Capital Allocation
• Utilize our strong cash flow primarily for organic investments, M&A and share buybacks

¹. These multi-year objectives are provided as of August 18, 2021.
Synopsys: The Market and Technology Leader

Uniquely Positioned for Stability and Growth

► Robust End Markets Driving Growth

• Clear Technology Leadership

• Financial Strength and Growth
Global Value Chain – 2021E
EDA & IP – At the Heart of Accelerating Electronics Innovation

EDA & IP  $14.0B
Embedded Software  $12.8B
Foundry  $98.6B
Semiconductors  $605.4B
Electronic Systems  $1,850B

Sources: ESD Alliance, Ipnest (Apr 2021), MarketsandMarkets (Mar 2020), IC Insights (Jan, June 2021), Internal estimates (June 2021)
Blue Chip, Diversified Customer Base

**Semiconductors**
- Semi R&D (including EDA) is a top investment priority for semi and system customers in all phases of business cycle
- Consists of virtually all semiconductor companies in the world, including all of the top 20
- One >10% customer in FY20

**Systems**
- ~40% of our revenue comes from systems companies
- Systems companies develop chips as an input to an end product, rather than selling the chip itself
- Verification challenges are rapidly growing at the intersection of hardware and software

**Software Developers**
- Key function across all industries: semis and systems, to enterprises in segments such as financial services, medical devices, automotive, and industrial
- Targeting the 20M+ SW developers
- Immense software complexity challenges plus high impact of security vulnerabilities
New Technology is Impacting Every Vertical
Artificial Intelligence Market Growth

Deep Learning Chipset Market to Reach $72B by 2025

Source: Tractica 2019


($ Millions)
Enabling and Leveraging the Potential of AI

Synopsys tools incorporate AI/ML technologies while enabling AI processor development

Design and Verification Tools for AI Processors

- Multiple years of collaboration alongside AI pioneers – deep understanding of AI design implications and challenges
- Verification solutions from architecture to simulation to emulation and prototyping
- Fusion Design Platform™ significantly enhanced to address AI processor design challenges
Enabling and Leveraging the Potential of AI

Synopsys tools incorporate AI/ML technologies while enabling AI processor development

Leading AI-based Chip Design Technologies

• DSO.ai (Mar. 2020): The world’s first AI-driven design solution, delivers a significant leap in designer productivity

• “ML Everywhere” enables continuous improvement for better PPA and faster TTR

• “Synopsys’s PrimeTime with new machine-learning technology allows us to complete ECO runs in hours versus the days it took before, and reuse learnings across blocks, hierarchies, and even design styles.”
  - Renesas
Enabling and Leveraging the Potential of AI

Synopsys tools incorporate AI/ML technologies while enabling AI processor development

**IP Solutions Designed for AI Applications**

- Proven IP solutions accelerate time-to-market
- Memory/interface/analog IP designed to handle the uniquely intensive AI demands of memory capacity, bandwidth and coherency
- ABI Research forecasts AI chipset sales to exceed $10B in 2024 with SoCs across all markets containing AI capabilities
Automotive – A Case Study

**CHIPS**
4 Billion transistors

**SYSTEMS**
Infotainment, GPS, Drivetrain, Sensors

**SOFTWARE**
>150M Lines of Code per vehicle

**ARTIFICIAL INTELLIGENCE**
Big Data, Capture, Analyze, Decision Making

**AUTONOMOUS DRIVING**
Systems of Systems

**OWNERSHIP & INFRASTRUCTURE**
Entire Ecosystem
New Electronics Architecture Required

Integrated Compute and Smart Sensor Architecture Requires Redesign

- Integrated Controllers per Domain
- Sensor Fusion
- Connectivity and upgradeability
- Highest reliability, security and safety
Synopsys: The Market and Technology Leader

Uniquely Positioned for Stability and Growth

- Robust End Markets Driving Growth
- Clear Technology Leadership
- Financial Strength and Growth
Synopsys: Silicon to Software

**Software**
- Application security & quality testing
- Leader in Gartner’s Magic Quadrant

**Verification**
- Fastest engines & unified platform
- HW/SW verification & early SW bring-up

**IP**
- Broadest portfolio of silicon-proven IP
- #1 interface, embedded mem. & physical IP

**Design**
- Digital & custom AMS platforms
- Long-standing market leader
- Best quality of results & highest productivity

**Silicon**
- TCAD, lithography tools & yield optimization
- Down to 5nm & below
LEADER IN EDA

- Market and technology leader in EDA, the tools and technologies used to design semiconductor chips and systems
  ~$8.9 billion market*; generally tracks semiconductor R&D spend over time

- Growth drivers: all aspects of chip & system complexity

- All leading semiconductor companies in the world use Synopsys technology

- State-of-the-art design and verification platforms with unmatched global support

* 2021E; Source: ESD Alliance, Internal estimates (June 2021)
#1 in Digital Design: Synopsys Fusion Design Platform™

**Fusion Design Platform**

- **RTL Architect**
  - Test Fusion
- **Design Compiler NXT**
  - TestMAX
  - Fusion Compiler
- **IC Compiler II**
  - Signoff Fusion
- **Formality / ECO PrimeECO**
  - PrimeTime
  - PrimePower
  - PrimeShield
  - StarRC
  - IC Validator
  - RH Fusion

**Fusion Architecture**
- #1 Anchors: Synthesis, P&R, Signoff
- Fusion of algorithms, engines, data model

**Innovative Products**
- Industry Unique Fusion Compiler
- DC NXT, TestMAX, IC Validator NXT

**Market Leadership**
- AI-enhanced tools, AI-driven apps
- Cloud-ready
Synopsys Fusion Compiler™

- Only single product on market with innovative next-generation integration of synthesis, place & route and key signoff technologies
- Built with market-leading products
- Redefines conventional product boundaries; sharing of algorithms, code and data model
- New synthesis engine, developed from ground up for significantly higher capacity & performance
- Strong momentum with considerable benchmark wins and competitive displacements, driving accelerating digital design revenue growth
Custom Design Platform

**CUSTOM DESIGN PLATFORM**

- Custom Compiler
- PrimeSim

**Signoff Fusion**
- NanoTime
- PrimeLib
- StarRC
- IC Validator

**Innovative Products**
- Industry anchors HSPICE, CustomSim, FineSim
- Custom Compiler Next-generation custom layout

**Competitive Differentiation**
- Flexible, open environment
- Faster custom design closure

**Market Momentum**
- PrimeSim launched in March 2021
- Multiple full flow competitive displacements
Synopsys Custom Compiler™ Adoption Growing

Custom Compiler Adoption

- **2016**: 20 Customers
- **2017**: 40 Customers
- **2018**: 60 Customers
- **2019**: 80 Customers
- **2020**: 160 Customers

**CUSTOM DESIGN PLATFORM**

- Custom Compiler
- PrimeSim
- Signoff Fusion
- NanoTime
- PrimeLib
- StarRC
- IC Validator
Verification Continuum® Platform

Verdict

Best-in-Class Verification
Complete platform with #1 products in all categories, hardware-based and software-based

Fastest Engines
Highest-performance engines speed time-to-market

Accelerating Innovation
Investing in domain-specific, AI and cloud technology to improve verification efficiency

Verification Continuum® Platform

Machine Learning & Native Cloud

Domain-Specific Solutions
Verification Hardware: ZeBu® Server 4 Emulation System

Leading System for Software Bring-up
Only modern system to allow software-on-hardware validation

Industry’s Fastest Emulation System
2X higher performance

Industry’s Largest Capacity
Scalable to 19B+ gates

Industry’s Lowest Total Cost of Ownership
1/10th lower power consumption, half data center footprint
Introducing Application-Specific Verification Hardware

ZeBu EP1: Industry’s First 10 MHz Emulator
- Accelerates hardware/software verification for SoCs up to 2 billion gates
- 3-4x higher performance vs competition
- Supports at-speed, full-visibility debug and all emulation use cases

ZeBu Empower: Industry’s First Power Emulator
- Enables power verification of complex SoC running real-world software
- Native Cloud scalability for billions of SW cycles on multi-billion gate SoCs
- Integrates with PrimePower, the industry’s golden power signoff solution
Verification Hardware: HAPS-100 Prototyping System

Industry’s Highest Performance Prototyping System
20-50 MHZ for complex SoC software development and system validation

Industry’s Highest Prototyping Debug Productivity
4x higher debug performance vs HAPS-80

Enterprise and Ecosystem Scalability
HAPS Gateway software enabling multi-design, multi-user parallelization

Proven Direct Connect Architecture
Broadest portfolio of accessory cards for real-world IO connectivity
Leader in Semi IP

• #2 market share in IP, the reusable building blocks that are used for chip designs
  – Leading supplier of interface, memory, analog and physical IP
  – ~$5.1 billion market*, benefitting from our customers’ move to outsourcing more and more complex IP

• IP reuse reduces our customers’ chip design costs, lowers risk and speeds time-to-market

• Serving high-impact, growing markets (IoT, Automotive, Security, Cloud Computing), advanced processes & protocols

• >20 years of investment and commitment resulting in unmatched portfolio breadth, quality and reliability

* 2021E; Source: Ipenest (Apr 2021); Internal estimates (June 2021)
Broadest and Most Comprehensive IP Platform

- Broadest portfolio available in the market; FY20 revenue >$900M
- Covers vast majority of chip
- Growing demand for more integrated subsystems
- New markets drive new opportunities
- Customers count on us for the long haul to accelerating time-to-market and reduce risk

* Small boxes are standard cell library elements.
High-Impact Markets: Increasing Technology Complexity
Driving Growth in Third-Party IP Demand

- **AI**
  - Machine Learning,
  - Deep Neural Networks

- **AUTOMOTIVE**
  - ADAS,
  - Infotainment,
  - Connected Vehicle

- **CLOUD**
  - Networking,
  - Servers AI
  - Accelerators

- **IoT**
  - Smart Home,
  - Industrial,
  - Wearables
Comprehensive IP Solutions for Cloud Computing SoCs

**Servers**
- Improved power efficiency for high-density and edge environments

**Networking**
- Increasing data volume driven from rich media and high-speed devices

**Storage**
- Rapid data growth requires faster data access & local processing

**Artificial Intelligence**
- AI accelerators in cloud servers extract insights from large data sets

---

**DesignWare® Interface, Foundation and Processor IP for Cloud Applications**

- **Interface IP**: PCIe 6.0, 5.0, CXL, HBM2/2E, DDR5, 112G Ethernet, Die-to-Die
- **Foundation IP**: specialty memories & logic libraries
- **Processor IP**: ARC HS Processors
Silicon Lifecycle Management Platform

<table>
<thead>
<tr>
<th>Silicon Lifecycle Management</th>
<th>New Insights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Calibration Analytics</td>
<td>Monitor, manage and optimize the performance, health and security of the chip from initial qualification to end-of-life</td>
</tr>
<tr>
<td>Product Calibration Analytics</td>
<td>PrimeShield™</td>
</tr>
<tr>
<td>Yield Ramp Analytics</td>
<td>Yield Explorer®</td>
</tr>
<tr>
<td>Test and Quality Analytics</td>
<td>SiliconDash®</td>
</tr>
<tr>
<td>Predictive Maintenance Analytics</td>
<td>SLM Database</td>
</tr>
<tr>
<td></td>
<td>SiliconDash® Database</td>
</tr>
<tr>
<td></td>
<td>Adaptive Learning Engine</td>
</tr>
<tr>
<td></td>
<td>TestMAX® ALE</td>
</tr>
<tr>
<td></td>
<td>Embedded Learning Engine (ELE)</td>
</tr>
<tr>
<td></td>
<td>Hardware Monitor IP</td>
</tr>
<tr>
<td></td>
<td>PVT sensors, TestMAX® DFT/BIST</td>
</tr>
</tbody>
</table>

New Insights:
- Design Calibration Analytics
- Product Calibration Analytics
- Yield Ramp Analytics
- Test and Quality Analytics
- Predictive Maintenance Analytics
- SLM Database
- Adaptive Learning Engine
- TestMAX® ALE
- Embedded Learning Engine (ELE)
- Hardware Monitor IP
- PVT sensors, TestMAX® DFT/BIST

Monitor, manage and optimize the performance, health and security of the chip from initial qualification to end-of-life.
Entered the software security & quality space in 2014

- Assembled and developed the broadest portfolio of solutions on the market; $358 million revenue in FY20
- Solutions allow organizations to identify and fix security and quality defects early in software development lifecycle
- Approximately $2-2.5 billion served market: fragmented, with numerous point solutions; recognition of cost of software failure has increased dramatically
- Synopsys Polaris Software Integrity Platform® enables customers to fully leverage the strength of the core products and integrate Synopsys into critical development workflows
Software Security & Quality Market

TAM\(^1\): \(~\$4.5-6.5B\)

SAM: \(~\$2-2.5B\)

- Evolving, nascent market
- Growth drivers:
  - Omnipresence of software
  - Widespread connectivity exacerbates security issues
  - Significant business risk from breaches
  - Large development teams
- Market growth rate: mid-teens %
- Synopsys L-T multi-year growth objective:
  \(~15-20\%\) range as the market evolves*

1. AST, TVM/VA, cloud security

Sources: Gartner, Forrester, IDC, other external and internal analyses

*This multi-year objective is provided as of August 18, 2021
Growing the Software Integrity Platform - Acquisitions

- **Coverity**: Acquired 2014
  - **Tools Acquired**:
    - Quality & Security Advisor
    - Covery
    - TA DEV

- **CodenomiCon**: Acquired 2015
  - **Tools Acquired**:
    - Defense Fuzzer
    - AppCheck

- **Protecode**: Acquired 2015
  - **Tools Acquired**:
    - Software Composition Analysis

- **Digital Codiscope**: Acquired 2016
  - **Services Acquired**:
    - Professional Services
    - Managed Services
    - BSIMM
  - **Tools Acquired**:
    - SecureAssist
    - eLearning

- **Black Duck**: Acquired 2017
  - **Tools Acquired**:
    - Open source software management
    - Source code scanner
    - Comprehensive open source database
    - Correlate AppSec test results
    - Automatically prioritize vulnerabilities
    - Track remediation activities

- **Code Dx**: Acquired 2021
  - **Tools Acquired**:
    - Developer-friendly dynamic application security testing (DAST) for APIs and web apps

**Birth of Software Integrity Group**

- **T fools Acquired**:
  - TQA
  - IAST
  - R&D team from Quotium
  - Goanna (Coverity)
  - Static analysis for Fortran
  - FORCHECK
  - TINFOIL Security
The Most Complete Portfolio in the Industry

Static Analysis
- Find critical defects and vulnerabilities in code
- Runs in the dev environment and DevSecOps workflow
- OWASP Top 10 and CWE Top 25
- Automotive compliance (MISRA, ISO26262)

Software Composition Analysis
- Find known vulnerabilities in open-source & 3rd party code
- Identifies license and compliance risks
- Tests source and binaries in apps and containers
- Supply chain total health with SW BoM

Dynamic Analysis
- Tests running apps for security vulnerabilities
- Enables dev to fix security flaws early in the SDLC
- API Scanner for IoT devices and mobile backend servers
- Fuzzing for automotive protocols and 5G

Security Services
- Strategic analysis to build Software Security Initiative
- DevSecOps integration injects security into dev workflow
- Managed services provides full testing capabilities
- Architecture/design modeling eliminates software flaws
Build Trust in Your Software

Polaris

Code Sight

Intelligent Orchestration

Code Dx

SAST/
Coverity

SCA/
Black Duck

IAST/
Seeker

3rd Party Products

Fuzzing/
Defensics

DAST/
Tinfoil

eLearning

Open Source Products

Security Testing Services

Strategy, programs, and services

Comprehensive
SW security & quality across entire SW development lifecycle

Developer-centric
Automated tools integrated into existing DevOps toolchains

Higher Fidelity
Intelligently detect & fix vulnerabilities and manage risk
Synopsys is a Leader in Application Security Testing
Recognized as a Leader for the 5th year in a row

2021 Gartner Magic Quadrant for Application Security Testing

Download a free copy of the 2021 Magic Quadrant for Application Security Testing.

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Recognized Leader in End-to-End Application Security

Synopsys is the only vendor recognized as the leader in both SAST & Open Source (SCA)

Download a free copy of The Forrester Wave™: Static Application Security Testing, Q1 2021

Download a free copy of The Forrester Wave™: Software Composition Analysis, Q3 2021
Trusted Partner

Our mission is to help build secure, high-quality software faster
Growth Strategy

Leverage the Polaris Software Integrity Platform®

- Polaris, coupled with the strength of the core products, enables selling across the entire portfolio to increase revenue potential and create strategic relationships with customers

Highlight Differentiating Consulting Services

- Services for high-level benchmarking, security strategy/ transformation, program development guidance and large product deployments

Refine and Scale Field

- Sales channel: leverage international presence; continually enhance capacity and focus on large enterprise customers, key verticals and the growing adoption of DevSecOps and securing the Cloud; indirect channel partner program
- Emphasis on customer success to ensure long-term relationships

Balance near-term growth and profitability with investments to capitalize on long-term opportunity
Synopsys: The Market and Technology Leader

Uniquely Positioned for Stability and Growth

• Robust End Markets Driving Growth
• Clear Technology Leadership
  ▶ Financial Strength and Growth
Excellent Financial Execution

Nearly 90% recurring revenue model with $4.7B non-cancellable backlog provides stability throughout the business cycle***

** A GAAP to non-GAAP reconciliation of FY16 to FY21E earnings per share is included at the end of this presentation
** FY21E reflects guidance provided as of August 18, 2021
*** We define recurring revenue as revenue generated from time-based products, multi-period IP contracts, and maintenance and services, for which revenue is recognized over time

Strong financial execution while investing for long-term growth
Cash Flow & Capital Allocation

- Roughly tracks EBITDA less cash taxes on multi-year basis
- Variable from year to year, based mainly on timing of large contracts and payments

* Includes approximately $230M in one-time payments
** FY21E reflects targets provided by Synopsys as of August 18, 2021

Operating Cash Flow (M)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18*</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21E**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$587</td>
<td>$635</td>
<td>$424</td>
<td>$801</td>
<td>$991</td>
<td>~$1,350</td>
</tr>
</tbody>
</table>

Stock Repurchases (M)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>YTD21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repurchases</td>
<td>$400</td>
<td>$400</td>
<td>$400</td>
<td>$329</td>
<td>$242</td>
<td>$573</td>
</tr>
</tbody>
</table>

- Repurchased more than $2B in stock since 2016
- Capital allocation priorities:
  - Internal investments
  - Buybacks and acquisitions
Corporate Social Responsibility

Our strong belief is that in addition to providing high-value, sophisticated technology, we must be responsible citizens and leaders in how we manage our strategy and operations, act as stewards for our environment, and advance positive social impact. We’re making good progress. For example:

- Taking climate action. In 2020, we pledged to reduce our GHG emissions by 25% reduction by 2024 over our 2018 baseline.

- Ensuring inclusion & diversity throughout our organization. Our I&D efforts have led to notably expanded gender diversity across the company and on our board.

- Enhancing employee engagement. Our efforts to ensure a highly motivated, productive workforce are frequent, thoughtful, and results-driven.
Our Smart Future CSR program provides a focus and structure for how we address both our own operational impact on the world and our ability to influence others around us.
CSR Advancements 2020

**REPORTING**
Second [CSR Report](#) published with alignment to GRI standards.

**HUMAN CAPITAL**
Updated the Compensation and Organizational Development Committee’s responsibilities to elevate the importance of human capital.

**INCLUSION & DIVERSITY**
Rolled out Inclusive Leaders Program for managers.
Board of Directors: 33% women

**ENVIRONMENT**
Entered into one of the world’s largest aggregated Virtual Power Purchase Agreement (VPPA) for the purchase of new renewable energy. Read the [press release](#).
Achieved CarbonNeutral® company certification for second consecutive year.

**SUPPLY CHAIN**
Joined [Renewable Energy Buyers Alliance](#) (REBA) to support our supply chain partners’ efforts to decarbonize.
Market and Technology Leader

Electronic Design Automation
Semiconductor Intellectual Property
Software Security & Quality

Solid Financials
Recurring revenue model
Large, non-cancellable backlog
Excellent execution
GAAP to Non-GAAP Reconciliation (1)
Earnings Per Share – Full Fiscal Year 2021 Targets

<table>
<thead>
<tr>
<th>Range for Fiscal Year</th>
<th>October 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Target GAAP earnings per share</td>
<td>$ 4.63</td>
</tr>
<tr>
<td>Adjustments:</td>
<td></td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>0.53</td>
</tr>
<tr>
<td>Stock compensation</td>
<td>2.16</td>
</tr>
<tr>
<td>Acquisition-related costs</td>
<td>0.07</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>0.25</td>
</tr>
<tr>
<td>Legal matters</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Non-qualified deferred compensation plan</td>
<td>(0.85)</td>
</tr>
<tr>
<td>Target non-GAAP earnings per share</td>
<td>$ 6.78</td>
</tr>
</tbody>
</table>

Shares used in non-GAAP calculation (midpoint of target range) 157,500 157,500

(1) Synopsys’ fourth fiscal quarter and fiscal year will end on October 30, 2021. For presentation purposes, we refer to the closest calendar month end.

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on August 18, 2021.
## GAAP to Non-GAAP Reconciliation(1)

### Operating Margin – Full Fiscal Year 2020 and Midpoint of 2021 Targets

<table>
<thead>
<tr>
<th></th>
<th>Twelve Months Ended</th>
<th>Twelve Months Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>October 31, 2020</td>
<td>10/31/2021 (2)</td>
</tr>
<tr>
<td>GAAP operating margin</td>
<td>16.8%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>2.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Stock compensation</td>
<td>6.7%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Acquisition-related costs</td>
<td>0.4%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>1.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Legal matters</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Non-qualified deferred compensation plan</td>
<td>0.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Target non-GAAP operating margin</td>
<td>28.0%</td>
<td>30.6%</td>
</tr>
</tbody>
</table>

(1) Synopsys' fiscal year 2020 ended on October 31, 2020 and its fiscal year 2021 will end on October 30, 2021, respectively. For presentation purposes, we refer to the closest calendar month end.

(2) These numbers represent the midpoint of targets in the prepared remarks provided on August 18, 2021, and do not represent official guidance for fiscal year 2021.

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on August 18, 2021.
### GAAP to Non-GAAP Reconciliation

**Earnings Per Share – Full Fiscal Years 2016 to 2020 Actual Results**

<table>
<thead>
<tr>
<th></th>
<th>ASC 605 FY 2016</th>
<th>ASC 605 FY 2017</th>
<th>ASC 605 FY 2018</th>
<th>ASC 606 FY 2019</th>
<th>ASC 606 FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAAP diluted net income per share</td>
<td>$1.73</td>
<td>$0.88</td>
<td>$2.82</td>
<td>$3.45</td>
<td>$4.24</td>
</tr>
<tr>
<td>Adjustments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>0.84</td>
<td>0.70</td>
<td>0.82</td>
<td>0.65</td>
<td>0.59</td>
</tr>
<tr>
<td>Stock compensation</td>
<td>0.63</td>
<td>0.70</td>
<td>0.91</td>
<td>1.01</td>
<td>1.53</td>
</tr>
<tr>
<td>Acquisition-related costs</td>
<td>0.07</td>
<td>0.06</td>
<td>0.14</td>
<td>0.04</td>
<td>0.09</td>
</tr>
<tr>
<td>Restructuring charges</td>
<td>0.06</td>
<td>0.24</td>
<td>0.08</td>
<td>0.31</td>
<td>0.23</td>
</tr>
<tr>
<td>Legal and tax matters</td>
<td>-</td>
<td>0.05</td>
<td>0.17</td>
<td>(0.12)</td>
<td>-</td>
</tr>
<tr>
<td>Income tax related to transition tax</td>
<td>-</td>
<td>-</td>
<td>0.41</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax related to tax rate change</td>
<td>-</td>
<td>-</td>
<td>0.33</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income tax related to tax restructuring</td>
<td>-</td>
<td>-</td>
<td>(1.12)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tax Impact of repatriation</td>
<td>-</td>
<td>1.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tax settlement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.11</td>
<td>-</td>
</tr>
<tr>
<td>Tax adjustments</td>
<td>(0.31)</td>
<td>(0.28)</td>
<td>(0.65)</td>
<td>(0.89)</td>
<td>(1.13)</td>
</tr>
<tr>
<td>Non-GAAP diluted net income per share</td>
<td>$3.02</td>
<td>$3.42</td>
<td>$3.91</td>
<td>$4.56</td>
<td>$5.55</td>
</tr>
</tbody>
</table>

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on August 18, 2021.
THANK YOU