Corporate Overview for Investors
June 2015
Forward-Looking Statements

This presentation contains forward-looking statements under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, including statements regarding projected financial results and long-term growth rates. For a discussion of important factors that could cause actual results to differ materially from those in such statements, see the section entitled “Risk Factors” in Synopsys’ most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K.

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 orally to their most comparable GAAP measures are included in the second quarter fiscal 2015 earnings release and financial supplement, dated May 20, 2015, and available on Synopsys' website at www.synopsys.com/Company/InvestorRelations/Pages/FinancialNews.aspx.
Synopsys Introduction

- **Global leader** in Electronic Design Automation (EDA), the tools and technologies used to design chips

- **Leading provider** of semiconductor Intellectual Property (IP), the reusable building blocks that are used for chip designs

- **The market & technology leader:** Virtually all leading-edge semiconductor designs in the world use Synopsys technology
Strategic Priorities – Next Several Years

• **Maintain** our clear technical, business and support leadership in core EDA

• **Drive** continued growth in IP and Systems

• **Expand** our presence in the software quality, test and security space
## Synopsys: The Market & Technology Leader

<table>
<thead>
<tr>
<th></th>
<th>FY14</th>
<th>FY15 (Target*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue:</td>
<td>$2.057B</td>
<td>$2.210 – $2.235B (7-9%)</td>
</tr>
<tr>
<td>NG EPS:</td>
<td>$2.53</td>
<td>$2.76 – $2.81 (9-11%)</td>
</tr>
<tr>
<td>Business Model:</td>
<td>~90% time-based</td>
<td></td>
</tr>
<tr>
<td>Revenue Sources:</td>
<td>~½ International</td>
<td></td>
</tr>
<tr>
<td>Employees:</td>
<td>~9,450</td>
<td></td>
</tr>
<tr>
<td>Market Cap:</td>
<td>~$7.8B</td>
<td></td>
</tr>
<tr>
<td>Founded:</td>
<td>1986</td>
<td></td>
</tr>
<tr>
<td>Patents Granted:</td>
<td>2,404</td>
<td></td>
</tr>
</tbody>
</table>

* These targets were provided by Synopsys as of May 20, 2015, and are not being updated at this time
Synopsys: The Market & Technology Leader
Uniquely Positioned for Stability and Growth

• Dynamic markets
• Clear technology leadership
• Financial strength and growth
Global Value Chain

EDA & IP – At the Heart of Accelerating Electronics Innovation

- **Semiconductors**: $353B
- **Foundry**: $42.1B
- **Embedded Software**: $4.3B
- **Electronic Systems**: $1,488B
- **EDA & IP**: $9.0B

*Estimates are provided for EDA/IP/Embedded Software.
Source: IC Insights, VDC Research, Synopsys Estimates
Helping Design the Chips Inside

*Impacting Everyone, Everything, Everywhere, Every Day*

- Mobile
- Medical
- Automotive
- Cloud Infrastructure
- Internet of Things
- Computing & Peripherals
- Data Center & Networking
- Military / Aerospace
- Digital Home
- Industrial

© 2015 Synopsys, Inc.
Mobile

Global Internet Device Sales

Source: Business Insider's “2013 - The Year Ahead In Mobile”, January report
By 2017, the annual global IP traffic will surpass the zettabyte threshold (1.4 zettabytes).

Source: Cisco Systems, VNI Global Mobile Data Traffic Forecast Update 2013
Internet of Things

Power  Buildings  Cars  Toasters  Lamps…?

“Smart”

Software  Sensors  Microprocessors  Storage  Communication

Example

<table>
<thead>
<tr>
<th>Year</th>
<th>Lines of Code</th>
<th>SW &amp; E/E % Vehicle Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>100K</td>
<td>&lt;9%</td>
</tr>
<tr>
<td>1990</td>
<td>1M</td>
<td>33%</td>
</tr>
<tr>
<td>2010</td>
<td>100M</td>
<td>&gt;40%</td>
</tr>
</tbody>
</table>
Significant Growth in Sensors

Sensor Units to Grow to 30 Billion Units in 2017

- **Consumer**
- **Automotive**
- **Computing**
- **Smartphones**
- **Feature Phones**
- **Industrial**
- **Other Communications**

Source: Semico Research, 2013

30B Units

22.3% CAGR (’13 to ’17)

© 2015 Synopsys, Inc. 12
Semiconductor Design Complexity

• An advanced design today will take 18-24 months to complete, and can cost up to $200M
• Complexity of designs has increased exponentially, requiring more, and more advanced, EDA tools
• As IC design complexity grows, there is the need to embed an increasing amount of IP
• The adoption of FinFET technologies drives further design challenges
• Increasing software content presents more challenges
Complexity Drives Demand for Tools

Synopsys Consistently Leads in Advanced Designs

- Leading companies migrating to very advanced nodes; some waiting at 32/28nm
- Many choosing to skip 22/20nm and go to 16/14nm FinFET
- Ramp of 16/14nm FinFET appears robust
- Our tools are used for all processes

Source: Synopsys Global Technical Services
Leading the Way in FinFET

Tracking nearly 220 FinFET designs and tape-outs worldwide

Synopsys is integral to >95% of them

Source: Synopsys  Global Technical Service
Comprehensive FinFET Solution

Synopsys’ FinFET Leadership

• Have invested in the extremely fast-growing FinFET segment for almost a decade
• Comprehensive solution, ranging from TCAD to design tools, to IP, to sophisticated support
• Collaboration with key foundries
• Believe we have a sustainable advantage over our competitors
Designs Are Becoming More Costly

Primary Designs

Note: Primary Designs are new and more-complex design(s), typically shipping in high-volumes, are developed on the next process node, require qualification on a whole new range of IP, and typically contain extensive software content.

Source: IBS, July 2014
Blue Chip Customer Base

- Customer base consists of virtually all semiconductor companies in the world, including all of the top 20
- One >10% customer (Q215)
- For many years we have collaborated closely with market leaders, including top foundries, IDMs and fabless customers
Synopsys: The Market & Technology Leader

Uniquely Positioned for Stability and Growth

- Dynamic markets
- Clear technology leadership
- Financial strength and growth
Broadest Portfolio of Best-in-Class Technology
#1 in Core EDA

- 61% of current revenue; 4.2% trailing twelve-month revenue growth*
- ~95% of FinFET designs and tape-outs have relied on Synopsys
- Vast majority of advanced designs utilize Synopsys digital verification
- 19 of the top 20 semiconductor companies rely on Synopsys analog circuit simulation

**Key Technologies**

- Synthesis
- Place & Route
- Signoff
- Physical Verification

- Custom Design
- Digital & AMS verification
- Emulation
- FPGA Design

* As of May 2015
IC Compiler II
Game-Changer in Place & Route

Rebuild
New Infrastructure
- Multi Hier
- Multi Mode
- Multi Thread
- Multi Voltage
- Multi View

Rethink
New Engines
- Timer
- Floor Plan
- Opt.
- Clock Tree

Reuse
Best of IC Compiler I
- Linear Placer
- Zroute

Enabling 10X Throughput
**Verification Continuum**

- Game-changing new platform launched in 2014
- Seamless integration
- Built around best-in-class engines; adding unified debug, compile
- Goal: speed software bring-up by ~6 mos
- First deliverable: Verification Compiler 2014
- Additional integration in 2015
2014: Verification Compiler
Comprehensive, Best-in-Class Verification in One Product
Enable “3X” Verification Productivity
ZeBu Server-3

*Industry’s Fastest Emulation System*

**Performance**
Speeds HW/SW bring-up and SoC verification up to 4X for faster time-to-market

**Hybrid Emulation**
Links to virtual prototype for architecture optimization and early SW development

---

ZeBu Server-3: 300M gates in a 20” cube
< 2.5 kW, <155 pounds

---

**Debug**
Comprehensive debug with full signal visibility and Verdi³ integration

**Architecture**
Advanced architecture for lower total cost of ownership

**Capacity**
Industry’s highest capacity – scalable to three billion gates
#1 in Manufacturing

- 8% of current revenue; -1% trailing twelve-month revenue growth*
- Mask data prep tools used by 8 of the top 10 semiconductor manufacturers
- TCAD tools used by 9 of the top 10 semiconductor manufacturers
- Yield management solution reducing time to production yield

Key Technologies

- Mask Synthesis
- Mask Data Prep
- Yield Management
- TCAD

* As of May 2015
Growth in Core EDA + Manufacturing

Estimated Long-Term Organic Growth Rate

- Generally in the low-to-mid single digit range*
- Growth drivers:
  - Segment growth + market share gains

Segment Growth Drivers

- Semi R&D growth
- Demand for new designs, new devices
- Increasing complexity requiring new, advanced solutions

Share Growth Drivers

- Leading expertise and experience in advanced processes and key IP
- Most powerful tools and most complete flows providing better results, lower total cost
- New products/technologies

* This multi-year objective is provided as of May 20, 2015 and is not being updated at this time
Growth in IP/Systems/Software Integrity

- 28% of current revenue; 26% trailing twelve-month revenue growth*
- Estimated long-term organic revenue growth: generally in the low double-digits**
- Top-20 semiconductor vendors continue to outsource more IP to Synopsys
- System Design outsourcing driven by need for earlier, more efficient software development, and hardware/software verification

Key Technologies

- Interface IP
- Analog IP
- System-Level Design
- Embedded Memories
- IP Subsystems

Virtual and FPGA-based prototyping
Software Integrity includes our Coverity quality, test and security solutions

* As of May 2015
** This multi-year objective is provided as of May 20, 2015 and is not being updated at this time
#2 IP Vendor

*Leader in Interface, Analog & Memory IP*

Leadership Enables Investment in Quality, Support, Features and Processes

### Design IP Revenue, Wired Interface

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2014</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synopsys</td>
<td>217.8</td>
<td>45.7%</td>
</tr>
<tr>
<td>2</td>
<td>Silicon Image</td>
<td>59.9</td>
<td>12.6%</td>
</tr>
<tr>
<td>3</td>
<td>Cadence Design Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rambus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>ARM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Arasan Chip Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Faraday Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PLDA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mobiveil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Others</td>
<td>60.0</td>
<td>12.6%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>476.8</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Gartner, April 2014*

### Design IP Revenue, Memory Cells/Blocks

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2014</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synopsys</td>
<td>76.1</td>
<td>30.3%</td>
</tr>
<tr>
<td>2</td>
<td>ARM</td>
<td>73.8</td>
<td>29.4%</td>
</tr>
<tr>
<td>3</td>
<td>eMemory Technology</td>
<td>33.5</td>
<td>13.3%</td>
</tr>
<tr>
<td>4</td>
<td>Kilopass Technology</td>
<td>24.7</td>
<td>9.8%</td>
</tr>
<tr>
<td>5</td>
<td>Sidense</td>
<td>9.3</td>
<td>3.7%</td>
</tr>
<tr>
<td>6</td>
<td>Mentor Graphics</td>
<td>8.4</td>
<td>3.3%</td>
</tr>
<tr>
<td>7</td>
<td>Dolphin Technology</td>
<td>5.5</td>
<td>2.2%</td>
</tr>
<tr>
<td>8</td>
<td>eSilicon</td>
<td>5.5</td>
<td>2.2%</td>
</tr>
<tr>
<td>9</td>
<td>MoSys</td>
<td>3.4</td>
<td>1.4%</td>
</tr>
<tr>
<td>10</td>
<td>Flasys</td>
<td>2.1</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>8.9</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>251.2</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### Design IP Revenue, General Purpose Analog & Mixed Signal

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2014</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Synopsys</td>
<td>11.8</td>
<td>18.2%</td>
</tr>
<tr>
<td>2</td>
<td>Cadence Design Systems</td>
<td>6.5</td>
<td>10.1%</td>
</tr>
<tr>
<td>3</td>
<td>Faraday Technology</td>
<td>5.4</td>
<td>8.4%</td>
</tr>
<tr>
<td>4</td>
<td>Qualcomm Logic</td>
<td>4.7</td>
<td>7.3%</td>
</tr>
<tr>
<td>5</td>
<td>True Circuits</td>
<td>4.7</td>
<td>7.2%</td>
</tr>
<tr>
<td>6</td>
<td>Analog Bits</td>
<td>3.3</td>
<td>5.1%</td>
</tr>
<tr>
<td>7</td>
<td>RF Engines</td>
<td>3.1</td>
<td>4.8%</td>
</tr>
<tr>
<td>8</td>
<td>Kaben Wireless Silicon</td>
<td>2.7</td>
<td>4.1%</td>
</tr>
<tr>
<td>9</td>
<td>Dolphin Technology</td>
<td>2.7</td>
<td>4.1%</td>
</tr>
<tr>
<td>10</td>
<td>S3 Group</td>
<td>2.2</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>17.7</td>
<td>27.4%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>64.7</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Gartner, April 2014*
Third-Party IP – Synopsys Differentiator

Established Provider
- 15+ years of investment and execution

Resource Commitment
- ~2,600 IP Engineers Worldwide

Trusted IP Supplier
- Broad portfolio of high-quality, production-proven IP

* Small boxes are standard cell library elements
3rd Party IP Usage Will Continue to Double Through 2018

Strong Growth in 3rd Party IP Usage

- Escalating Design Costs
- Increasing Design Complexity
- Shorter Time Window for New Product Launch

Percentage of 3rd party IP blocks used in SoC design

Source: Gartner, July 2014
IP Market Growing to $4.3B by 2018

Source: Gartner, June 2014
IP Business Models

**Single Use**
- Customer buys IP for a specific project
- Revenue recognized up front

**Multi-Use Agreement**
- Customer buys a pool of IP that can be used over a multi-year period until the pool is exhausted or the contract expires
- Revenue recognized over time

**Engineering Service**
- Customer pays for porting IP to specific semiconductor process or customization work
- Revenue recognized primarily on % of completion basis
IP Accelerated Initiative

Fast Prototyping, Software Development & Integration

Redefining the IP Supplier Paradigm

IP Accelerated

- Broad IP Portfolio
- DesignWare IP Development Kits
  - IP Prototyping Kits
  - IP Software Development Kits
- Customized IP Subsystems

IP Accelerated augments broad, silicon-proven DesignWare IP portfolio with:

- IP prototyping kits with reference designs work out-of-the-box for immediate productivity
- IP software development kits enable early SW bring-up, debug and test
- Customized IP subsystems reduce integration cost, lower risk and speed time-to-market
System-Level Design

• #1 provider of system design solutions including tools, models and services for:
  – Accelerating software development
  – Hardware/Software integration
  – System validation

• Immense chip/system complexity requires new approaches to HW/SW and system integration challenges

• Exploding software content; need more efficient embedded SW development process
Synopsys Expands TAM w/ Coverity

News Release

Synopsys Enters Software Quality and Security Market with Coverity Acquisition
Coverity Improves Code Quality and Security, Resulting in Better Software, Faster

MOUNTAIN VIEW, Calif. and SAN FRANCISCO, Feb. 19, 2014 /PRNewswire/ -- Synopsys, Inc. (Nasdaq:SNPS), a global leader providing software, IP and services used to accelerate innovation in chips and electronic systems, and Coverity, the leading provider of software quality, testing, and security tools, today signed a definitive agreement for Synopsys to acquire Coverity. Coverity products reduce the risk of quality and security defects, which can lead to the catastrophic failures that plague many of today's largest software systems.

Under the terms of the definitive agreement, Synopsys will pay approximately $375 million, or $350 million net of cash acquired. In addition, Synopsys will assume certain unvested stock options of Coverity employees. The transaction will be funded by Synopsys with a combination of U.S. cash and debt, and is subject to Hart Scott Rodino regulatory review and other customary closing conditions. The acquisition is expected to close in Synopsys' fiscal Q2.

"Working together, Synopsys and Coverity intend to bring the software development process to the level of 'first-time-right' functionality that software design teams are striving for. For Synopsys this is a natural technology adjacency and the opening of a significant new, growing market space."

Aart de Geus
Chairman and co-CEO, Synopsys

• Acquired Coverity for $375M ($334M net of cash acquired)
• Leading provider of Software Quality, Testing and Security Tools; averaging ~20% revenue growth
• ~$500M market, expected to grow to ~$1B by 2017
• Natural adjacency and expansion of our TAM; LT growth opportunity beyond our existing customer base, in a fast-growing, new market
Current Synopsys Customers
Plus Brand New Customer Base

Current Semis/Systems Customers

Different Users, Different Budgets

Software

Verification

IP

Design

Silicon

New Verticals, Customers

Banking, Financial Services, Energy, Aerospace/Defense, Software, Internet, Industrial, etc.

Naturally adjacent
Core competencies:
• Algorithm-based technology
• Some overlapping customers
• Shared high-tech
• Customer-obsessed DNA

New industries Synopsys didn’t previously touch
Acquisitions to Expand Security Offering

- Announced intent to acquire Codenomicon (April 20)
- Independent discoverer of Heartbleed bug; security testing for embedded SW
- Announced intent to acquire assets of Quotium (May 28)
- Interactive application security testing (IAST), a well-known method of testing applications during the software development lifecycle
Software Test Markets and Strategies

Dynamic

Enter Dynamic

Unique technology to test only changed code

$1250M

Codenomicon Quotium

$560M

Coverity Original Breakthrough

find quality defects early without running code

$200M

Extend Technology to Security

find security defects early without running code

$240M

Static

Quality

Security

Strategies

1 Core Market
a) Leverage Synopsys in Embedded
b) Build on Success in New Markets
c) Extend Differentiation

2 Grow in Security
a) Extend Brand
b) Add more Checkers and more Languages

3 Enter Dynamic
a) Disruptive new Techniques

Source: Synopsys CBD, IDC, VDC - 2014
Synopsys: The Market & Technology Leader

Uniquely Positioned for Stability and Growth

- Dynamic markets
- Clear technology leadership
- Financial strength and growth
• Predictable, time-based revenue model
• Entered FY15 with ~80% of revenue in hand; enter each quarter with ~90% in hand
• Non-cancellable backlog: $3.5B 3-yr backlog end of FY14
• 12% non-GAAP EPS 5-year CAGR
• FY14 NG EPS includes slight dilution from SW Integrity Group

* These targets were provided by Synopsys as of May 20, 2015, and are not being updated at this time
Predictable Time-Based Revenue

- Significant Non-cancellable 3-year Backlog
  - $3.5B at end of FY14
  - More backlog than next 2 largest EDA players combined

- Predictable, time-based revenue model
  - In Q404, began transition to almost fully time-based license model; completed in Q407
  - Orders that once would have been taken to revenue immediately, instead contribute to backlog
  - Revenue recognized over the life of the contract (expecting weighted avg. contract duration of close to 3 years in FY15*)

* These targets were provided by Synopsys as of May 20, 2015, and are not being updated at this time
Strong Operating Cash Flow

- Roughly tracks EBITDA less cash taxes over time
- OCF is lumpy
  - Difficult to forecast period to period
  - Timing of large contracts
  - Disbursements (affected by M&A)
- Goal is to optimize the use of our strong cash flow, through a balance of M&A, debt reduction and stock buybacks

* These targets were provided by Synopsys as of May 20, 2015, and are not being updated at this time
Efficient Resource Management

- Most profitable ($) in EDA
- Have reduced G&A and S&M spending (as % of revenue)
- Expect to maintain NG R&D spend at ~30% of revenue
- Goal is to focus on global operational efficiency to deliver solid NG operating margin in the mid-20s range
Technologically & Geographically Diversified

- **Product Groups** (TTM Revenue Growth*)
  - Core EDA: 4.2%
  - IP/Systems/Software Integrity: 26.2%
  - Manufacturing: -1%

- **Geographies** (TTM Revenue Growth*)
  - North America: 16.1%
  - Europe: 0.1%
  - Japan: -8.5%
  - Asia Pacific: 8.3%

* As of May 2015
Capital Allocation Strategy

Disciplined resource management and allocation

Actively explore TAM-expanding R&D and M&A opportunities

Optimize the use of our strong cash flow, through a balance of M&A, debt reduction and stock buybacks
Solid Balance Sheet

- $785M net cash at end of Q215
- Split of U.S. vs. non-U.S. cash can influence investment decisions
- Buybacks and debt repayments funded entirely with U.S. cash
- Typically like to hold a minimum of ~$100M in U.S. cash on the balance sheet
Returning Cash to Shareholders

- Since 2010, spent $1.1B on buybacks
  - $180M in 1H 2015
- $200M remaining on our current share repurchase authorization*
- Goal is to optimize the use of our strong cash flow, through a balance of M&A, debt reduction and stock buybacks

* As of May 2015
Long-term Operating Model*

Primary long-term objective is to drive high-single-digit EPS growth through a mix of the following elements:

• Organically grow traditional EDA revenue generally in the low-to-mid single digit range
• Organically grow IP/Systems/SW Integrity revenue generally in the low double-digits
• Actively explore TAM-expanding R&D and M&A opportunities
• Focus on global operational efficiency to deliver solid non-GAAP operating margin in the mid-20s range
• Optimize the use of our strong cash flow, through a balance of M&A, debt reduction and stock buybacks

Note: While the combination of elements may vary, based on business cycles and in-period priorities, our long-term driving principles remain consistent.

* This multi-year objective is provided as of May 20, 2015 and is not being updated at this time
Summary

- Dynamic markets
  - World’s leading EDA supplier and #2 IP vendor
- Clear technology leadership
  - Broadest portfolio of best-in-class technology with multi-year upgrade cycle
- Financial strength and growth
  - Excellent financial position and execution
Thank You