

# FINANCIAL SUPPLEMENT Q4 & FY2016

NOVEMBER 30, 2016

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## FISCAL YEAR 2017 FINANCIAL TARGETS <sup>1</sup>

	Q1 FY2017	FY2017
Revenue (million)	\$630 - \$645	\$2,570 - \$2,600
GAAP Expenses (million)	\$540 - \$558	
Non-GAAP Expenses (million)	\$485 - \$495	
Other Income and Expense Net (million)	\$0 - \$2	\$0 - \$4
Normalized Annual Non-GAAP Tax Rate	19%	19%
Fully Diluted Outstanding Shares (million)	152 - 155	152 - 155 <sup>2</sup>
GAAP Earnings Per Share	\$0.43 - \$0.50	\$1.92 - \$2.06
Non-GAAP Earnings Per Share	\$0.77 - \$0.80	\$3.16 - \$3.23 <sup>3</sup>
Cash Flow from Operations (million)		~\$500
Capital Expenditures (million)		~\$100
Average Renewable License Duration		~3.0 years
Stock-Based Compensation (million)		~\$109

- (1) These targets were provided by Synopsys as of November 30, 2016, and are not being updated at this time.  
(2) We intend to slightly reduce fully diluted share count from 2016 levels through expected buybacks in fiscal 2017.  
(3) Cigital and Codiscope acquisitions are expected to be modestly dilutive to 2017 non-GAAP EPS.

## Q1 FY2017 ACQUISITIONS

### Cigital (Nov. 2016)

- Provider of software security managed and professional services.
- Specializes in identifying, remediating and preventing vulnerabilities in software applications.
- Terms not disclosed; not material to SNPS.

### Codiscope (Nov. 2016)

- 2015 spinoff of Cigital and provider of complementary security tools.
- Offers a suite of streamlined tools for a broad population of developers.
- Terms not disclosed; not material to SNPS.

## REVENUE BY PRODUCT GROUP (Unaudited)

(in millions)	Q115	Q215	Q315	Q415	FY15	Q116	Q216	Q316	Q416	FY16
Core EDA	317.4	337.9	348.2	370.2	1,373.7	339.7	355.9	384.4	371.3	1,451.4
<i>% of Revenue</i>	59%	61%	63%	63%	61%	60%	59%	62%	59%	60%
IP/Systems/SI	163.3	156.4	140.9	152.1	612.6	167.0	182.6	167.6	199.6	716.8
<i>% of Revenue</i>	30%	28%	25%	26%	27%	29%	30%	27%	31%	30%
Manufacturing	45.0	44.9	47.0	47.0	183.8	48.6	54.5	52.9	54.1	210.1
<i>% of Revenue</i>	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%
Services & Other	16.4	18.1	19.8	17.8	72.1	13.3	11.9	10.3	8.8	44.3
<i>% of Revenue</i>	3%	3%	4%	3%	3%	2%	2%	2%	1%	2%
<b>Total</b>	<b>542.0</b>	<b>557.2</b>	<b>555.8</b>	<b>587.2</b>	<b>2,242.2</b>	<b>568.6</b>	<b>605.0</b>	<b>615.2</b>	<b>633.7</b>	<b>2,422.5</b>

Revenue from our products and services is categorized into four groups:

- Core EDA, which includes digital and custom integrated circuit (IC) design software, verification products, and field-programmable gate array (FPGA) design software;
- IP, Systems and Software Integrity (SI), which includes our DesignWare® IP portfolio, system-level design products, prototyping and software quality and security testing solutions;
- Manufacturing Solutions, which includes TCAD, mask & yield management tools; and
- Professional Services and Other, which includes a broad range of consulting and design services, along with the impact of gains and losses from foreign currency hedges.

Note: Amounts included in the table above may not foot due to rounding. Product revenue data for multi-product transactions is determined using management methodologies and allocations and is therefore subject to certain assumptions. In addition, we allocate maintenance revenue to the products to which those maintenance services relate.

## REVENUE BY GEOGRAPHIC REGION (Unaudited)

(in millions)	Q115	Q215	Q315	Q415	FY15	Q116	Q216	Q316	Q416	FY16
North America	281.3	289.8	280.3	313.7	1,165.1	282.9	303.5	322.6	316.6	1,225.6
<i>% of Revenue</i>	52%	52%	50%	53%	52%	50%	50%	52%	50%	51%
Europe	71.9	75.0	80.3	73.2	300.4	71.9	73.1	66.9	75.4	287.4
<i>% of Revenue</i>	13%	13%	14%	12%	13%	13%	12%	11%	12%	12%
Japan	60.9	53.2	51.0	53.7	218.8	53.2	58.5	63.1	65.1	240.0
<i>% of Revenue</i>	11%	10%	9%	9%	10%	9%	10%	10%	10%	10%
Asia Pacific	128.0	139.2	144.2	146.6	558.0	160.5	169.8	162.6	176.6	669.6
<i>% of Revenue</i>	24%	25%	26%	25%	25%	28%	28%	26%	28%	28%
<b>Total</b>	<b>542.0</b>	<b>557.2</b>	<b>555.8</b>	<b>587.2</b>	<b>2,242.2</b>	<b>568.6</b>	<b>605.0</b>	<b>615.2</b>	<b>633.7</b>	<b>2,422.5</b>

Note: Amounts included in the table above may not foot due to rounding. Geographic revenue data for multi-regional, multi-product transactions reflect internal allocations and are therefore subject to certain assumptions and to management's methodology.

## SELECTED FINANCIAL AND OPERATING METRICS

	Q115	Q215	Q315	Q415	FY15	Q116	Q216	Q316	Q416	FY16
Revenue Mix (millions) <sup>1</sup>										
- Time-Based Products	431.0	447.8	445.8	467.5	1,792.2	464.3	484.2	479.3	483.2	1,910.9
% of total revenue	80%	80%	80%	80%	80%	82%	80%	78%	76%	79%
- Upfront Products	46.5	44.3	48.9	57.7	197.3	43.4	58.2	66.9	79.7	248.1
% of total revenue	9%	8%	9%	10%	9%	8%	9.6%	10.9%	13%	10%
- Maintenance and Service <sup>2</sup>	64.5	65.0	61.1	62.0	252.7	60.9	62.7	69.0	70.9	263.5
% of total revenue	12%	12%	11%	11%	11%	11%	10%	11%	11%	11%
Avg renewable license duration (yrs) <sup>3</sup>	~2.4	~2.5	~2.5	~2.9	~2.7	~3.7	~2.3	~3.1	~2.7	~3.0
Backlog <sup>4</sup>					\$3.6 bn					\$3.54 bn
- Portion of projected revenue to come from backlog <sup>5</sup>					~80% of '16 rev					~80% of '17 rev
Non-GAAP Operating Margin <sup>6</sup>	25.7%	24.7%	22.4%	20.9%	23.4%	22.5%	25.4%	23.0%	22.9%	23.5%
Cash, Cash Equivalents & Short-term Investments (millions)	\$917	\$1,005	\$1,123	\$965	\$965	\$706	\$960	\$1,090	\$1,117	\$1,117
- % Held in U.S.	13%	15%	31%	16%	16%	16%	14%	12%	15%	15%
Outstanding Debt	\$303	\$220	\$213	\$205	\$205	\$228	\$250	\$278	\$205	\$205
Operating Cash Flow <sup>1,7</sup>	(\$87)	\$155	\$275	\$152	\$495	(\$35)	\$222	\$252	\$148	\$587
Capital Expenditures	\$19.6	\$24.4	\$23.7	\$19.3	\$87.0	\$15.3	\$13.6	\$19.3	\$18.7	\$66.9
Share Repurchases (millions) <sup>1</sup>										
- Number of Shares <sup>8</sup>	3.3	0.0	0.7	1.7	5.7	3.8	0.5	2.5	1.6	8.5
- Gross Share Repurchases	(\$180)	\$0	\$0	(\$100)	(\$280)	(\$200)	\$0	(\$125)	(\$75)	(\$400)
- Remaining Repurchase Authorization	\$200	\$200	\$200	\$500	\$500	\$300	\$300	\$175	\$435	\$435
DSO	48	55	50	60		57	45	47	63	
Employee Headcount	~9,300	~9,450	~9,835	~10,280	~10,280	~10,290	~10,360	~10,535	~10,665	~10,665

- (1) Amounts may not foot due to rounding.
- (2) Includes maintenance on term and perpetual licenses.
- (3) Weighted average duration of the license arrangements closed in the period reported.
- (4) Synopsys' three-year backlog was \$3.54 billion on October 31, 2016, representing a 1% decrease from backlog of ~\$3.6 billion on October 31, 2015. This decrease resulted primarily from the timing of large multi-year contract renewals. Backlog represents committed orders that are expected to be recognized as revenue during the following three years. Backlog may not be a reliable predictor of our future sales as business conditions may change and technologies may evolve, and customers may seek to renegotiate their arrangements or default on their payment obligations. For this and other reasons, we may not be able to recognize expected revenue from backlog when anticipated.
- (5) Amount of projected subsequent fiscal year revenue expected to come from backlog as of the end of the applicable fiscal year.
- (6) Should be read in conjunction with the company's 8-K filed with the SEC and the reconciliations of the non-GAAP financial measures to their comparable GAAP measures found in this Supplement.
- (7) Will typically track earnings before interest, taxes, depreciation and amortization (EBITDA) over time (less cash taxes). As operating cash flow is inherently lumpy, we believe it is important to look at multi-year averages.
- (8) During Q416, we purchased 1.27 million shares in the open market for \$75 million. During Q316, we entered into an accelerated share repurchase (ASR) agreement for \$125 million. Under this agreement, we received 2.0 million shares in Q316 and the balance of 0.35 million shares in early Q416 when the ASR was completed. During Q116, we entered into an ASR agreement for \$200 million. Under this agreement, we received 3.5 million shares in Q116, 0.5 million shares in Q216 and the remaining balance of 0.5 million shares in early Q316 when the ASR was completed. During Q415, we entered into an ASR agreement for \$100 million. Under this agreement, we received 1.7 million shares in Q415 and the balance of 0.4 million shares in Q116 when the ASR was completed.

## SUPPLEMENTAL GAAP TO NON-GAAP RECONCILIATION, THREE MONTHS (Unaudited, in thousands, except per share amounts)

### Supplemental GAAP to Non-GAAP information

(unaudited and in thousands, except per share amounts)

	Three Months Ended October 31, 2016		
	GAAP	Adjustments (1)	Non-GAAP
Cost of revenue:			
Products	\$ 92,946	\$ (2,723)	\$ 90,223
Maintenance and service	26,691	(603)	26,088
Amortization of intangible assets	22,574	(22,574)	-
Operating expenses:			
Research and development	\$ 221,954	\$ (12,125)	\$ 209,829
Sales and marketing	131,494	(4,830)	126,664
General and administrative	42,164	(6,505)	35,659
Amortization of intangible assets	6,493	(6,493)	-
Restructuring charges	6,646	(6,646)	-
Operating income	\$ 82,757	\$ 62,499	\$ 145,256
Other income (expense), net	\$ (5)	\$ 1,735	\$ 1,730
Provision (benefit) for income taxes	\$ 10,055	\$ 17,872	\$ 27,927
Net income	\$ 72,697	\$ 46,362	\$ 119,059
Net income per share (Diluted)	\$ 0.47	\$ 0.30	\$ 0.77

Shares used in computing per share amounts:

Diluted	154,331	154,331
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- (1) The adjustments to the various line items resulted from excluding the following from non-GAAP measures: stock compensation of \$25.5 million, amortization of intangible assets of \$29.1 million, acquisition-related costs of \$3.0 million, restructuring charges of \$6.6 million, changes in the fair value of the non-qualified deferred compensation plan of \$1.7 million, and tax adjustments of \$17.9 million.

## SUPPLEMENTAL GAAP TO NON-GAAP RECONCILIATION, TWELVE MONTHS (Unaudited, in thousands, except per share amounts)

### Supplemental GAAP to Non-GAAP information

(unaudited and in thousands, except per share amounts)

	Twelve Months Ended October 31, 2016		
	GAAP	Adjustments (1)	Non-GAAP
<b>Cost of revenue:</b>			
Products	\$ 346,825	\$ (11,626)	\$ 335,199
Maintenance and service	94,019	(2,480)	91,539
Amortization of intangible assets	102,118	(102,118)	-
<b>Operating expenses:</b>			
Research and development	\$ 856,705	\$ (55,079)	\$ 801,626
Sales and marketing	502,368	(20,475)	481,893
General and administrative	165,962	(22,272)	143,690
Amortization of intangible assets	27,507	(27,507)	-
Restructuring charges	9,633	(9,633)	-
Operating income	\$ 317,395	\$ 251,190	\$ 568,585
Other income (expense), net	\$ 12,153	\$ (4,400)	\$ 7,753
Provision (benefit) for income taxes	\$ 62,722	\$ 46,781	\$ 109,503
Net income	\$ 266,826	\$ 200,009	\$ 466,835
Net income per share (Diluted)	\$ 1.73	\$ 1.29	\$ 3.02

Shares used in computing per share amounts:

Diluted	154,721	154,721
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- (1) The adjustments to the various line items resulted from excluding the following from non-GAAP measures: stock compensation of \$97.6 million, amortization of intangible assets of \$129.6 million, acquisition-related costs of \$9.9 million, restructuring charges of \$9.6 million, changes in the fair value of the non-qualified deferred compensation plan of \$4.4 million, and tax adjustments of \$46.8 million.

## GAAP TO NON-GAAP OPERATING MARGIN RECONCILIATION (Unaudited)

	Three Months Ended October 31, 2016	Twelve Months Ended October 31, 2016
GAAP operating margin	13.1%	13.1%
Amortization of intangible assets	4.6%	5.4%
Stock compensation	4.0%	4.0%
Acquisition-related costs	0.5%	0.4%
Restructuring charges	1.0%	0.4%
Change in value of non-qualified deferred compensation	-0.3%	0.2%
Non-GAAP operating margin	<u>22.9%</u>	<u>23.5%</u>

## GAAP TO NON-GAAP RECONCILIATION OF FIRST QUARTER FY2017 TARGETS

	Range for Three Months Ending January 31, 2017 (1)	
	Low	High
Target GAAP expenses	\$ 540,000	\$ 558,000
Adjustments:		
Estimated impact of amortization of intangible assets	(30,000)	(34,000)
Estimated impact of stock compensation	(25,000)	(29,000)
Target non-GAAP expenses	\$ 485,000	\$ 495,000

	Range for Three Months Ending January 31, 2017 (1)	
	Low	High
Target GAAP earnings per share	\$ 0.43	\$ 0.50
Adjustments:		
Estimated impact of amortization of intangible assets	0.22	0.20
Estimated impact of stock compensation	0.19	0.16
Estimated impact of tax adjustments <sup>(2)</sup>	(0.07)	(0.06)
Target non-GAAP earnings per share	\$ 0.77	\$ 0.80

Shares used in non-GAAP calculation (midpoint of target range)	153,500	153,500
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## GAAP TO NON-GAAP RECONCILIATION OF FY2017 TARGETS

	Range for Fiscal Year Ending October 31, 2017 (1)	
	Low	High
Target GAAP earnings per share	\$ 1.92	\$ 2.06
Adjustments:		
Estimated impact of amortization of intangible assets	0.77	0.74
Estimated impact of stock compensation	0.76	0.70
Acquisition-related costs	-	-
Estimated impact of restructuring	-	-
Estimated impact of tax adjustments <sup>(2)</sup>	(0.29)	(0.27)
Target non-GAAP earnings per share	\$ 3.16	\$ 3.23

Shares used in non-GAAP calculation (midpoint of target range)	153,500	153,500
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(1) Synopsys' first quarter and fiscal year end on January 28, 2017 and October 28, 2017, respectively. For presentation purposes, we refer to the closest calendar month end.

(2) Fiscal 2017 tax adjustments reflect the application of our normalized annual non-GAAP tax rate to non-GAAP pre-tax income.



## GAAP TO NON-GAAP RECONCILIATIONS

Please see our Current Report on Form 8-K filed with the SEC on November 30, 2016 available at <http://www.sec.gov> for the reasons why Synopsys believes that the presentation of non-GAAP financial measures provides useful information to our shareholders regarding our financial condition and results of operations and the purposes for which management uses such non-GAAP financial measures. Certain non-GAAP data used by management, as well as the reconciliation of such data to its most directly comparable GAAP measures, is contained in the fourth quarter and full fiscal year 2016 earnings release available on Synopsys' website at [www.synopsys.com/Company/InvestorRelations/Pages/FinancialNews.aspx](http://www.synopsys.com/Company/InvestorRelations/Pages/FinancialNews.aspx) and our Current Report on Form 8-K filed with the SEC on November 30, 2016. In addition to the adjustments described in the Current Report on Form 8-K, the non-GAAP financial measures provided in this Supplement also exclude changes in the fair value of our non-qualified deferred compensation plans since such changes typically do not require current cash settlement and because they are not used by us in assessing the profitability of our business operations.

## FORWARD-LOOKING STATEMENTS

This Supplement contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, including, but not limited to, the financial targets and the GAAP to Non-GAAP reconciliations of such financial targets, as well as the expected future revenue from current revenue backlog. These statements involve known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those expressed or implied in our forward-looking statements. Accordingly, we caution stockholders and prospective investors not to place undue reliance on these statements. Such risks, uncertainties and factors include, but are not limited to: uncertainty in the growth of the semiconductor and electronics industry; consolidation among our customers; continued uncertainty in the global economy; our ability to realize the potential financial or strategic benefits of acquisitions we complete; changes in accounting principles or standards; fluctuation of our operating results; our highly competitive industries and our ability to meet our customers' demand for innovative technology at lower costs; our ability to protect our proprietary technology; application of the actual consolidated GAAP tax rate, or our decision to change our Non-GAAP normalized tax rate, as a result of a number of factors, including the actual geographic mix of revenue during the quarter and year, tax law changes, actions by government authorities, or judgment by management, based upon the status of pending audits and settlements, to increase or decrease an income tax asset or liability; investments of more resources in research and development than anticipated; risks and compliance obligations relating to the global nature of our operations; cybersecurity threats or other security breaches; liquidity requirements in our U.S. operations; claims that our products infringe on third-party intellectual property rights; product errors or defects; litigation; the ability to obtain licenses to third-party software and intellectual property on reasonable terms or at all; the ability to timely recruit and retain senior management and key employees; evolving corporate governance and public disclosure regulations; the inherent limitations on the effectiveness of our controls and compliance programs; the impairment of our investment portfolio by the deterioration of capital markets and the change in the fair value of our non-qualified deferred compensation plan obligations; the accuracy of certain assumptions, judgments and estimates that affect amounts reported in our financial statements; and the impact of catastrophic events. More 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 Quarterly Report on Form 10-Q for the third quarter ended July 31, 2016 and in its Annual Report on Form 10-K for the fiscal year ended October 31, 2016 to be filed with the SEC by December 28, 2016.

## EFFECTIVENESS OF INFORMATION

The information provided herein is as of November 30, 2016. Although this Supplement will remain available on Synopsys' website through the date of the first quarter fiscal 2017 earnings call in February 2017, its continued availability through such date does not mean that Synopsys is reaffirming or confirming its continued validity. Synopsys does not currently intend to, and assumes no obligation to, report on its progress during the first quarter of fiscal 2017 or comment to analysts or investors on, or otherwise update, the information contained in this Supplement.