FINANCIAL SUPPLEMENT Q4 & FY2017

November 29, 2017

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CONTACT

Synopsys, Inc.
Investor Relations
Phone: (650) 584-4257
Email: invest-info@synopsys.com

FISCAL YEAR 2018 SELECTED FINANCIAL TARGETS (1)

	Q1 FY2018	FY2018 (incl. Black Duck)	FY2018 (Selected metrics excl. Black Duck)
Revenue (million)	\$740 - \$765	\$2,880 - \$2,910(2)	\$2,820 - \$2,855
GAAP Expenses (million)	\$625 - \$641		
Non-GAAP Expenses (million)	\$560 - \$570		
Other Income and Expense Net (million)	(\$1) - \$1	(\$6) – (\$2)	
Normalized Annual Non-GAAP Tax Rate	19%	19%	
Fully Diluted Outstanding Shares (million)	153 - 156	153 - 156	
GAAP Earnings Per Share	\$0.62 - \$0.70	\$2.24 - \$2.38(2)	\$2.68 - \$2.80
Non-GAAP Earnings Per Share	\$0.98 - \$1.02	\$3.46 - \$3.53(2)	\$3.58 - \$3.65
Cash Flow from Operations (million)		\$500 - \$550(3)	
Capital Expenditures (million)		~\$110	
Average Renewable License Duration		~3 years	
Stock-Based Compensation (million)		~\$130	

(1) These targets were provided by Synopsys as of November 29, 2017, and are not being updated at this time.
(2) Black Duck acquisition is expected to contribute approximately \$55-60M in revenue (after deferred revenue haircut of ~\$25-30M), and be approximately 43 cents dilutive to GAAP EPS and 12 cents dilutive to non-GAAP EPS.
(3) Reflects one-time cash payments totaling approximately \$105M (~\$40M cash tax payment associated with repatriation of offshore cash, initiated in Q4'17; \$65M payment in connection with an ongoing tax dispute with Hungarian tax authority).

RECENT ACQUISITIONS

Black Duck Software Acquisition

- Definitive agreement announced Nov. 2017; expected to close in Dec. 2017 ***(Press Release)***
- SNPS will pay approximately \$565 million, or \$548 million net of cash acquired. U.S. Cash. Subject to HSR review.
- Well-known Software Composition Analysis (SCA) solution will enhance SNPS efforts in the software security market. Black Duck's industry-leading products automate the process of identifying open source code and testing for known security vulnerabilities.

Sidense Corporation Acquisition

- Closed Oct. 2017 ***(Press Release)***
- Terms not disclosed. Not Material.
- One-time programmable (OTP) non-volatile memory (NVM) IP; complements our NVM IP.
- Expands DesignWare NVM IP solution to support 16-bit to 1.28 Mbit instances.

REVENUE BY PRODUCT GROUP (Unaudited)

(in millions)	FY15	Q116	Q216	Q316	Q416	FY16	Q117	Q217	Q317	Q417	FY17
Core EDA	1,373.7	339.7	355.9	384.4	371.3	1,451.4	368.5	390.6	407.2	402.8	1,569.1
% of Revenue	*61%*	*60%*	*59%*	*62%*	*59%*	*60%*	*56%*	*57%*	*59%*	*58%*	*58%*
IP/Systems/SI	612.6	167.0	182.6	167.6	199.6	716.8	214.2	221.9	216.5	226.2	878.8
% of Revenue	*27%*	*29%*	*30%*	*27%*	*31%*	*30%*	*33%*	*33%*	*31%*	*32%*	*32%*
Manufacturing	183.8	48.6	54.5	52.9	54.1	210.1	58.4	54.5	58.1	56.5	227.4
% of Revenue	*8%*	*9%*	*9%*	*9%*	*9%*	*9%*	*9%*	*8%*	*8%*	*8%*	*8%*
Services & Other	72.1	13.3	11.9	10.3	8.8	44.3	11.8	13.1	13.6	11.2	49.7
% of Revenue	*3%*	*2%*	*2%*	*2%*	*1%*	*2%*	*2%*	*2%*	*2%*	*2%*	*2%*
Total	**2,242.2**	**568.6**	**605.0**	**615.2**	**633.7**	**2,422.5**	**652.8**	**680.1**	**695.4**	**696.6**	**2,724.9**

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 including emulation, 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 security and quality 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)	FY15	Q116	Q216	Q316	Q416	FY16	Q117	Q217	Q317	Q417	FY17
North America	1,165.1	282.9	303.5	322.6	316.6	1,225.6	333.2	348.3	367.1	335.8	1,384.4
% of Revenue	*52%*	*50%*	*50%*	*52%*	*50%*	*51%*	*51%*	*51%*	*53%*	*48%*	*51%*
Europe	300.4	71.9	73.1	66.9	75.4	287.4	75.6	78.4	80.3	74.2	308.4
% of Revenue	*13%*	*13%*	*12%*	*11%*	*12%*	*12%*	*12%*	*12%*	*12%*	*11%*	*11%*
Japan	218.8	53.2	58.5	63.1	65.1	240.0	61.7	57.2	64.1	64.6	247.6
% of Revenue	*10%*	*9%*	*10%*	*10%*	*10%*	*10%*	*9%*	*8%*	*9%*	*9%*	*9%*
Asia Pacific	558.0	160.5	169.8	162.6	176.6	669.6	182.3	196.1	183.9	222.1	784.5
% of Revenue	*25%*	*28%*	*28%*	*26%*	*28%*	*28%*	*28%*	*29%*	*26%*	*32%*	*29%*
Total	**2,242.2**	**568.6**	**605.0**	**615.2**	**633.7**	**2,422.5**	**652.8**	**680.1**	**695.4**	**696.6**	**2,724.9**

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

	FY15	Q116	Q216	Q316	Q416	FY16	Q117	Q217	Q317	Q417	FY17
Revenue Mix (millions) [1]											
- Time-Based Products	1,792.2	464.3	484.2	479.3	483.2	1,910.9	489.4	501.1	503.5	527.8	2,021.8
% of total revenue	*80%*	*82%*	*80%*	*78%*	*76%*	*79%*	*75%*	*74%*	*72%*	*76%*	*74%*
- Upfront Products	197.3	43.4	58.2	66.9	79.7	248.1	79.6	83.5	100.3	74.9	338.2
% of total revenue	*9%*	*8%*	*9.6%*	*10.9%*	*13%*	*10%*	*12%*	*12%*	*14%*	*11%*	*12%*
- Maintenance and Service [2]	252.7	60.9	62.7	69.0	70.9	263.5	83.8	95.5	91.6	93.9	364.9
% of total revenue	*11%*	*11%*	*10%*	*11%*	*11%*	*11%*	*13%*	*14%*	*13%*	*13%*	*13%*
Avg renewable license duration (yrs) [3]	~2.7	~3.7	~2.3	~3.1	~2.7	~3.0	~2.8	~2.7	~2.5	~2.9	~2.7
Backlog [4]	$3.6 bn					$3.54 bn					$3.7 bn
- Portion of projected revenue to come from backlog [5]	~80% of '16 rev					~80% of '17 rev					~75% of '18 rev
Non-GAAP Operating Margin [6]	23.4%	22.5%	25.4%	23.0%	22.9%	23.5%	26.9%	24.6%	25.1%	18.7%	23.8%
Cash, Cash Equivalents & Short-term Investments (millions)	$965	$706	$960	$1,090	$1,117	$1,117	$966	$1,132	$1,302	$1,048	$1,048
- % held in U.S.	16%	16%	14%	12%	15%	15%	16%	11%	8%	53%	53%
Outstanding Debt	$205	$228	$250	$278	$205	$205	$320	$418	$436	$144	$144
Operating Cash Flow [1,7]	$495	($35)	$222	$252	$148	$587	$47	$123	$280	$185	$635
Capital Expenditures	$87.0	$15.3	$13.6	$19.3	$18.7	$66.9	$18.2	$13.0	$19.0	$20.1	$70.3
Share Repurchases (millions) [1]											
- Number of Shares	5.7	3.8	0.5	2.5	1.6	8.5	1.4	1.4	1.6	1.0	5.4
- Gross Share Repurchases	($280)	($200)	$0	($125)	($75)	($400)	($100)	($100)	($100)	($100)	($400)
- Remaining Repurchase Authorization	$500	$300	$300	$175	$435	$435	$335	$235	$500	$400	$400
DSO		57	45	47	63		46	50	54	59	
Employee Headcount		~10,290	~10,360	~10,535	~10,665		~11,280	~11,260	~11,490	~11,680	

(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 approximately $3.7 billion on October 31, 2017, representing an approximate 5% increase from backlog of ~$3.54 billion on October 31, 2016. This decrease resulted primarily from the timing of large multi-year contracts. 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.

SUPPLEMENTAL GAAP TO NON-GAAP RECONCILIATION, 3 MONTHS
(Unaudited, in thousands, except per share amounts)

	Three Months Ended October 31, 2017		
	GAAP	Adjustments (1)	Non-GAAP
Cost of revenue:			
Products	$ 108,221	$ (4,132)	$ 104,089
Maintenance and service	42,254	(1,118)	41,136
Amortization of intangible assets	16,389	(16,389)	-
Operating expenses:			
Research and development	$ 244,515	$ (17,999)	$ 226,516
Sales and marketing	154,006	(7,181)	146,825
General and administrative	26,190	21,333	47,523
Amortization of intangible assets	7,808	(7,808)	-
Restructuring charges	5,548	(5,548)	-
Operating income	$ 91,713	$ 38,842	$ 130,555
Other income (expense), net	$ 8,213	$ (7,273)	$ 940
Provision (benefit) for income taxes	$ 220,008	$ (195,024)	$ 24,984
Net income (loss)	$ (120,082)	$ 226,593	$ 106,511
Net income (loss) per share (Diluted)	$ (0.80)	$ 1.49	$ 0.69
Shares used in computing per share amounts:			
Diluted	150,448		154,543

(1) The adjustments to the various line items resulted from excluding the following from non-GAAP measures: stock compensation of $28.6 million, amortization of intangible assets of $24.2 million, acquisition-related costs of $3.6 million, restructuring charges of $5.5 million, changes in the fair value of the non-qualified deferred compensation plan of $7.3 million, legal matters of $30.4 million, tax impact of repatriation of $166.2 million, and tax adjustments of $28.9 million.

SUPPLEMENTAL GAAP TO NON-GAAP RECONCILIATION, 12 MONTHS
(Unaudited, in thousands, except per share amounts)

	Twelve Months Ended October 31, 2017		
	GAAP	Adjustments (1)	Non-GAAP
Cost of revenue:			
Products	$ 413,203	$ (15,613)	$ 397,590
Maintenance and service	164,872	(4,338)	160,534
Amortization of intangible assets	76,109	(76,109)	-
Operating expenses:			
Research and development	$ 908,841	$ (70,840)	$ 838,001
Sales and marketing	549,248	(27,601)	521,647
General and administrative	196,844	(36,991)	159,853
Amortization of intangible assets	31,614	(31,614)	-
Restructuring charges	36,586	(36,586)	-
Operating income	$ 347,563	$ 299,692	$ 647,255
Other income (expense), net	$ 35,535	$ (29,609)	$ 5,926
Provision (benefit) for income taxes	$ 246,535	$ (122,431)	$ 124,104
Net income (loss)	$ 136,563	$ 392,514	$ 529,077
Net income per share (Diluted)	$ 0.88	$ 2.54	$ 3.42
Shares used in computing per share amounts:			
Diluted	154,874		154,874

(1) The adjustments to the various line items resulted from excluding the following from non-GAAP measures: stock compensation of $108.3 million, amortization of intangible assets of $107.7 million, acquisition-related costs of $9.9 million, restructuring charges of $36.6 million, legal matters of $7.6 million, changes in the fair value of the non-qualified deferred compensation plan of $29.6 million, tax impact of repatriation of $166.2 million, and tax adjustments of $43.7 million.

GAAP TO NON-GAAP OPERATING MARGIN RECONCILIATION (Unaudited)

	Three Months Ended October 31, 2017	Twelve Months Endec October 31, 2017
GAAP operating margin	13.2%	12.8%
Amortization of intangible assets	3.5%	3.9%
Stock compensation	4.1%	4.0%
Acquisition-related costs	0.5%	0.4%
Restructuring charges	0.8%	1.3%
Legal matters	-4.4%	0.3%
Change in value of non-qualified deferred compensation	1.0%	1.1%
Non-GAAP operating margin	18.7%	23.8%

GAAP TO NON-GAAP RECONCILIATION OF FIRST QUARTER FISCAL YEAR 2018 TARGETS INCLUDING BLACK DUCK IMPACT

(in thousands, except per share amounts)

	Range for Three Months Ending January 31, 2018 (1)(2)	
	Low	**High**
Target GAAP expenses	$ 625,000	$ 641,000
Adjustments:		
Estimated impact of amortization of intangible assets	(35,000)	(38,000)
Estimated impact of stock compensation	(30,000)	(33,000)
Target non-GAAP expenses	$ 560,000	$ 570,000

	Range for Three Months Ending January 31, 2018 (1)(2)	
	Low	**High**
Target GAAP earnings per share	$ 0.62	$ 0.70
Adjustments:		
Estimated impact of amortization of intangible assets	0.25	0.23
Estimated impact of stock compensation	0.21	0.19
Estimated impact of tax adjustments	(0.10)	(0.10)
Target non-GAAP earnings per share	$ 0.98	$ 1.02
Shares used in non-GAAP calculation (midpoint of target range)	154,500	154,500

GAAP TO NON-GAAP RECONCILIATION OF FULL FISCAL YEAR 2018 TARGETS INCLUDING BLACK DUCK IMPACT

	Range for Fiscal Year Ending October 31, 2018 (1)(2)	
	Low	**High**
Target GAAP earnings per share	$ 2.24	$ 2.38
Adjustments:		
Estimated impact of amortization of intangible assets	0.89	0.86
Estimated impact of stock compensation	0.87	0.83
Estimated impact of tax adjustments	(0.54)	(0.54)
Target non-GAAP earnings per share	$ 3.46	$ 3.53
Shares used in non-GAAP calculation (midpoint of target range)	154,500	154,500

(1) Synopsys' first fiscal quarter has one extra week and will end on February 3, 2018. Fiscal year 2018 will end on November 3, 2018. For presentation purposes, we refer to the closest calendar month end.

(2) The estimates of Black Duck impacts are preliminary and may vary once closed and once the purchase price allocation is completed.

GAAP TO NON-GAAP RECONCILIATION OF FULL FISCAL YEAR 2018 TARGETS
EXCLUDING BLACK DUCK IMPACT

	Range for Fiscal Year Ending October 31, 2018 (1)			
	Low		High	
Target GAAP earnings per share	$	2.68	$	2.80
Adjustments:				
Estimated impact of amortization of intangible assets		0.56		0.54
Estimated impact of stock compensation		0.86		0.83
Estimated impact of tax adjustments		(0.52)		(0.52)
Target non-GAAP earnings per share	$	3.58	$	3.65
Shares used in non-GAAP calculation (midpoint of target range)		154,500		154,500

(1) Synopsys' first fiscal quarter has one extra week and will end on February 3, 2018. Fiscal year 2018 will end on November 3, 2018. For presentation purposes, we refer to the closest calendar month end.

GAAP TO NON-GAAP RECONCILIATIONS

Please see our Current Report on Form 8-K filed with the SEC on November 29, 2017 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 2017 earnings release available on Synopsys' website at https://www.synopsys.com/company/investor-relations/financial-news.html and our Current Report on Form 8-K filed with the SEC on November 29, 2017. 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, the expected future revenue from current revenue backlog and the expected closing of the acquisition of Black Duck Software. 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: our ability to consummate the acquisition in a timely manner or at all; the satisfaction of the conditions precedent to consummation of the acquisition, including the ability to secure regulatory approvals in a timely manner or at all; our ability to operate or integrate Black Duck's business and technologies with our own successfully; uncertainty in the growth of the semiconductor and electronics industry; consolidation among our customers and our dependence on a relatively small number of large customers; continued uncertainty in the global economy; our ability to realize the potential financial or strategic benefits of acquisitions we complete; 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 carry out our new product and technology initiatives; our ability to protect our proprietary technology; changes in accounting principles or standards; 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; changes in our GAAP or non-GAAP tax rate; liquidity requirements in our U.S. operations; claims that our products infringe on third-party intellectual property rights;

litigation; product errors or defects; increased risks resulting from an increase in sales of our hardware products; 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 Annual Report on Form 10-K for the fiscal year ended October 31, 2016, and in its Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2017.

EFFECTIVENESS OF INFORMATION

The information provided herein is as of November 29, 2017. Although this Supplement will remain available on Synopsys’ website through the date of the first quarter of fiscal year 2018 earnings call in February 2018, 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 year 2018 or comment to analysts or investors on, or otherwise update, the information contained in this Supplement.