

FINANCIAL SUPPLEMENT Q2 FY2019

May 22, 2019

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- [Press Release](#)
- [Webcast](#)
- [Form 10-K FY2018](#)
- [Form 10-Q Q2 FY2019](#)

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I. FISCAL YEAR 2019 SELECTED FINANCIAL RESULTS & TARGETS ^{(1) (2)}

FY2019	FY2018A ⁽³⁾ (ASC 605)	Implied FY2019 Comparative Metrics (ASC 605)	FY2019 Targets ⁽⁴⁾ (ASC 606)
Revenue (million) <i>Year-over-year growth rate</i>	\$3,121.1	\$3,340 - \$3,380 7%-8%	\$3,290 - \$3,350 5%-7%
GAAP Expenses (million)	\$2,760.8	\$2,798 - \$2,853	\$2,798 - \$2,853
Non-GAAP Expenses (million)	\$2,430.4	\$2,505 - \$2,525	\$2,505 - \$2,525
Other Income and Expense Net (million)	(\$1.3)	(\$12) - (\$8)	(\$12) - (\$8)
Normalized Annual Non-GAAP Tax Rate	13%	16%	16%
Fully Diluted Outstanding Shares (million)	153.4	153 - 156	153 - 156
GAAP Earnings Per Share	\$2.82	\$3.05 - \$3.47	\$2.85 - \$3.27
Non-GAAP Earnings Per Share	\$3.91	\$4.44 - \$4.60	\$4.24 - \$4.40
Cash Flow from Operations (million)	\$424.2	\$670 - \$700	\$670 - \$700
Capital Expenditures (million)	\$99.0	~\$270	~\$270
Average Renewable License Duration	~2.7 years	~3 years	~3 years
Stock-Based Compensation (million)	\$140	~\$160	~\$160

Q3 FY2019	Q2 FY2019A (ASC 606)	Q3 FY2019 Targets (ASC 606)
Revenue (million)	\$836.2	\$810 - \$850
GAAP Expenses (million)	\$720.7	\$700 - \$746
Non-GAAP Expenses (million)	\$626.4	\$620 - \$640
Other Income and Expense Net (million)	\$2.2	(\$4) - (\$2)
Normalized Annual Non-GAAP Tax Rate	16%	16%
Fully Diluted Outstanding Shares (million)	153.9	153 - 156
GAAP Earnings Per Share	\$0.77	\$0.60 - \$0.83
Non-GAAP Earnings Per Share	\$1.16	\$1.07 - \$1.12

- (1) These targets were provided by Synopsys as of May 22, 2019.
- (2) As required by the new revenue recognition standard (ASC 606), Synopsys will report results under ASC 605 and ASC 606 for the fiscal 2019 transition year. We will provide financial targets under ASC 606, and in FY19, to enable historical comparability, we will translate full-year targets into ASC 605 comparative metrics.
- (3) Extra week in Q1'FY18 contributed approximately \$46M additional revenue and 7 cents per share to non-GAAP EPS.
- (4) Our expanded guidance ranges are a result of the recent government action to place a certain customer and its affiliates on the "Entity List," restricting the sale of U.S. technology to the named entities. We are not able to book new business with these entities, and revenue associated with these entities is put "on hold" until either the contract expires, or the restriction is lifted.

II. SUMMARY OF CERTAIN DISCRETE ITEMS

Income Statement: Certain Discrete Operating Items

Revenue FY17-FY18	FY17A ASC 605	FY18A ASC 605
Reported results	\$2,724.9	\$3,121.1
Extra week in Q1'18		~+\$46M
Black Duck impact (acquired Q1'18)		~+\$60M

Non-GAAP EPS FY17-FY18	FY17A ASC 605	FY18A ASC 605
Reported results	\$3.42	\$3.91
Extra Week in Q1'18		~+7 cents
Black Duck impact (acquired Q1'18)		~(10 cents)

Revenue FY18-FY19	FY18A ASC 605	FY19E* ASC 606
Reported results; Guidance midpoint	\$3,121.1	\$3,320.0
Extra week in Q1'18		~+\$46M
ASC 606 transition year impact		~(\$40M)

Non-GAAP EPS FY18-FY19	FY18A ASC 605	FY19E* ASC 606
Reported results; Guidance midpoint	\$3.91	\$4.32
Extra Week in Q1'18		~+7 cents
ASC 606 transition year impact		~(20 cents)

Cash Flow Statement: Certain Discrete Items

Operating Cash Flow One-time Items	FY18A	FY19E*
Reported results; Guidance midpoint	\$424.2	\$685M⁽⁶⁾
Hungary tax dispute (Q1'18) ⁽¹⁾	~(\$66M)	
Repatriation tax (Q2'18) ⁽²⁾	~(\$33M)	
Siemens/Mentor litigation settlement (Q3'18) ⁽³⁾	~(\$65M)	
IP transfer tax (Q4'18) ⁽⁴⁾	~(\$67M)	
Litigation settlement (Q1'19) ⁽⁵⁾		~\$18M

(1) Outstanding dispute with Hungarian tax authorities; payment required in order to appeal ruling

(2) Tax on 4Q'17 repatriation of ~\$825M in offshore cash

(3) Conclusion of all outstanding patent litigation with Siemens/Mentor

(4) One-time tax payment on transfer of IP resulting from tax restructuring due to US tax reform

(5) Receipt from litigation settlement

(6) Reflects additional uncertainty due to trade restrictions announced May, 2019 as well as some restructuring costs as we reallocate resources for future growth

* Midpoint of FY19 targets

Capital Expenditures 2019 Capital Projects	FY19E
Guidance	~\$270M
Wuhan facility ⁽⁷⁾	~\$50M
Infrastructure ⁽⁸⁾	~\$110M
SV office consolidation ⁽⁹⁾	~\$110M

(7) Development costs associated with Wuhan, China facility

(8) IT and facility infrastructure upgrades to support growth

(9) Relocation of several Silicon Valley corporate offices to single location

III. LONG-TERM FINANCIAL OBJECTIVES (EFFECTIVE APRIL 2019)

While the results in any given period may vary due to acquisitions or other near-term priorities, our primary long-term objective is to drive **double-digit non-GAAP EPS growth** on a multi-year basis, through a mix of the following elements:

- Grow **total revenue** generally in the **high-single-digit range**
 - **EDA revenue** generally in the **mid-to-high single digits**
 - **IP/Systems revenue** generally in the **low double-digits**
 - **Software Integrity revenue** generally in the **20% range**
- Drive non-GAAP **operating margin into the high-twenties by 2021, and the 30% range longer-term**
- Utilize our strong **cash flow primarily for M&A and share buybacks**

IV. REVENUE BY PRODUCT GROUP (Unaudited)

(\$ millions)	FY17	Q118	Q218	Q318	Q418	FY18	Q119	Q219	Q119	Q219
	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 606	ASC 606
EDA	1,796.4	482.1	485.8	493.0	476.2	1,937.2	481.2	530.8	500.8	492.7
<i>% of Revenue</i>	66%	63%	63%	63%	60%	62%	60%	62%	61%	59%
IP & System Integration	753.4	219.3	222.1	214.2	241.0	896.6	234.2	236.9	235.8	259.2
<i>% of Revenue</i>	28%	28%	29%	27%	30%	29%	29%	28%	29%	31%
Software Integrity	173.8	64.1	67.8	71.3	77.3	280.5	78.3	86.1	82.5	83.2
<i>% of Revenue</i>	6%	8%	9%	9%	10%	9%	10%	10%	10%	10%
Other	1.3	3.9	1.2	1.1	0.5	6.8	4.3	-1.2	1.3	1.1
Total	2,724.9	769.4	776.8	779.7	795.1	3,121.1	798.1	852.6	820.4	836.2

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

- EDA, which includes digital and custom integrated circuit (IC) design software, verification products, manufacturing-related products, and field-programmable gate array (FPGA) design software;
- IP & System Integration, which includes our DesignWare® IP portfolio, system-level design products, prototyping products, and general professional services;
- Software Integrity, which includes solutions that test software code for security vulnerabilities and quality defects, as well as professional and managed services; and
- Other, which includes university programs and 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 reflect internal allocations based upon certain assumptions and management's methodology. In addition, we allocate maintenance revenue to the products to which those maintenance services relate.

V. REVENUE BY GEOGRAPHIC REGION (Unaudited)

(\$ millions)	FY17	Q118	Q218	Q318	Q418	FY18	Q119	Q219	Q119	Q219
	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 606	ASC 606
North America	1,384.4	400.5	387.6	373.8	387.7	1,549.6	386.3	453.6	414.5	433.9
<i>% of Revenue</i>	51%	52%	50%	48%	49%	50%	48%	53%	51%	52%
Europe	308.4	85.5	97.0	90.7	96.0	369.1	86.9	89.2	83.9	83.5
<i>% of Revenue</i>	11%	11%	12%	12%	12%	12%	11%	10%	10%	10%
Japan	247.6	68.4	70.4	72.0	72.5	283.3	70.2	69.3	65.1	72.7
<i>% of Revenue</i>	9%	9%	9%	9%	9%	9%	9%	8%	8%	9%
Asia Pacific	784.5	215.1	221.8	243.3	238.9	919.0	254.7	240.5	256.9	246.1
<i>% of Revenue</i>	29%	28%	29%	31%	30%	29%	32%	28%	31%	29%
Total	2,724.9	769.4	776.8	779.7	795.1	3,121.1	798.1	852.6	820.4	836.2

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 based upon certain assumptions and management's methodology.

VI. SELECTED FINANCIAL AND OPERATING METRICS

	FY17	Q118	Q218	Q318	Q418	FY18	Q119	Q219
	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 605	ASC 606	ASC 606
Revenue License Type (millions) ⁽¹⁾								
- Time-Based Products	\$2,021.8	\$570.9	\$556.8	\$570.1	\$605.6	\$2,303.3	\$553.7	\$558.3
- Upfront Products	\$338.2	\$91.6	\$100.0	\$99.6	\$66.6	\$357.7	\$130.5	\$143.4
- Maintenance and Service ⁽²⁾	\$364.9	\$106.9	\$120.1	\$110.1	\$123.0	\$460.0	\$136.2	\$134.5
Revenue Mix (% of total revenue) ⁽¹⁾								
- Recurring Revenue ⁽³⁾	88%	88%	87%	87%	92%	89%	89%	90%
- Non-Recurring Revenue	12%	12%	13%	13%	8%	11%	11%	10%
Avg renewable license duration (yrs) ⁽⁴⁾	~2.7	~3.0	~2.6	~2.5	~2.7	~2.7	~2.9	~2.7
Non-GAAP Operating Margin ⁽⁵⁾	23.8%	25.5%	24.5%	21.5%	17.1%	22.1%	24.5%	25.1%
Cash, Cash Equivalents & Short-term Investments (millions)	\$1,048	\$606	\$571	\$741	\$723	\$723	\$592	\$631
- % held in U.S.	53%	24%	23%	18%	25%	25%	23%	28%
Outstanding Debt	\$144	\$572	\$524	\$622	\$469	\$469	\$542	\$292
Operating Cash Flow ^{(1),(6)}	\$635	(\$59)	\$63	\$289	\$131	\$424	(\$144)	\$353
Capital Expenditures ⁽¹⁾	\$70.3	\$28.3	\$20.3	\$21.9	\$29.0	\$99.0	\$29.0	\$40.0
Share Repurchases (millions) ⁽¹⁾								
- Number of Shares	5.4	2.3	0.4	1.8	-	4.5	0.3	0.8
- Gross Share Repurchases	(\$400)	(\$200)	(\$35)	(\$165)	-	(\$400)	(\$29)	(\$100)
- Remaining Repurchase Authorization	\$400	\$200	\$490	\$325	\$325	\$325	\$296	\$196
DSO		64	67	59	64		85	57
Employee Headcount		~12,290	~12,590	~13,030	~13,250		~13,450	~13,580
Revenue by Segment (millions) ⁽⁷⁾⁽⁸⁾								
- Semiconductor & System Design						\$2,840.6	\$737.9	\$753.0
% of Total						91%	90%	90%
- Software Integrity						\$280.5	\$82.5	\$83.2
% of Total						9%	10%	10%
Adjusted Op Income by Segment (millions) ⁽⁷⁾⁽⁸⁾								
- Semiconductor & System Design						\$701.3	\$195.3	\$201.4
- Software Integrity						-\$10.6	\$5.6	\$8.4
Adjusted Operating Margin by Segment ⁽⁷⁾⁽⁸⁾								
- Semiconductor & System Design						24.7%	26.5%	26.8%
- Software Integrity						-3.8%	6.8%	10.1%

(1) Amounts may not foot due to rounding.

(2) Includes maintenance on term and perpetual licenses.

(3) 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. Prior to ASC 606 adoption, multi-period IP contracts covering unspecified titles were recognized ratably and considered time-based revenue. Beginning in Q1'19 with the adoption of ASC 606, revenue from these contracts is considered upfront revenue. However, revenue from these contracts is still recognized over the duration of the contract as the customer draws down the contract balance.

(4) Weighted average duration of the license arrangements closed in the period reported.

(5) Should be read in conjunction with our Form 8-K filed with the SEC on May 22, 2019 and the reconciliations of the non-GAAP financial measures to their comparable GAAP measures found in this Financial Supplement.

(6) Will typically track earnings before interest, taxes, depreciation and amortization (EBITDA) over time (less cash taxes). As operating cash flow is inherently lumpy, it is important to look at multi-year averages. FY2018 operating cash flow reflected approximately \$230 million of one-time payments, while Q1'19 operating cash flow included approximately \$18 million of one-time inflows, as summarized in the Operating Cash Flow: Certain Discrete Items table on page 2 of this Financial Supplement.

(7) We manage the business on a long-term, annual basis, and consider quarterly fluctuations of revenue and profitability as a normal element of our business. Quarterly variability, which increases as a result of ASC 606, should be expected.

(8) These segment results are consistent with the information required by ASC 280. They are presented to reflect the information that is considered by Synopsys' chief operating decision maker (CODM) to evaluate the operating performance of its segments. The CODM does not allocate certain operating expenses managed at a consolidated level to our reportable segments, and as a result, the reported

operating income and operating margin do not include these unallocated expenses. Such unallocated expenses consist of stock-based compensation expense, amortization of intangible assets, restructuring, litigation and acquisition-related costs. Refer to Section VIII for detailed information about these unallocated expenses. Management excludes these same expenses to arrive at non-GAAP measures used to evaluate and make decisions about Synopsys as a whole.

VII. ASC TOPIC 606 – DESCRIPTION OF CHANGES

“Accounting Standards Codification Topic 606 – Revenue from Contracts with Customers” (implemented in Q1 FY19)

In May 2014, the Financial Accounting Standards Board issued new revenue recognition requirements that became effective for Synopsys in FY19. We adopted these changes using the “modified retrospective method,” under which the cumulative effect of initially applying the new recognition standards is recognized at the date of initial application (Q1 of FY19). The estimated transition impact described below is based on calculations that remain ongoing and will likely change throughout the year.

Description:

- Adoption of ASC 606 is an accounting change regarding the rules of revenue recognition for multi-product contracts.
- ASC 606 does not change our operations or how we run our business. It will have no impact on cash flow or compensation plans, and revenue from the majority of our contracts will be unchanged.

What changes:

- **One-time:** using the “modified retrospective method,” a portion of our contracted but unsatisfied performance obligations (“backlog”) was recast at the beginning of FY19. Revenue during the 2019 transition year is currently estimated to be approximately \$40 million lower under ASC 606 than it would be under ASC 605.
- **Ongoing:** our time-based revenue from multi-period IP license contracts that was previously recognized ratably (as time-based revenue) will instead be recognized in the period in which the IP is delivered (as upfront revenue), resulting in greater quarterly variability.
However, there is no change to our IP arrangements, the economic value of those arrangements, or the cash flow they generate.

Metric	Primary Accounting Treatment		Impact
	ASC 605	ASC 606	
Software License Revenue	Time-based	Time-based	n/m*
IP License Revenue	Majority time-based	Recognized on delivery throughout contract term; recorded as Upfront <i>(see below example)</i>	Moderate
Hardware Revenue	Upfront	Upfront	n/m*
Maint & Service Revenue	Time-based	Time-based	n/m*
Commission Expense	On shipment	Over contract term	n/m*

* Not material

Example: Customer signs contract for use of \$9 million worth of IP licenses over 3-year period			
	Year 1	Year 2	Year 3
Customer Activity:	5 IP titles delivered to customer with total value of \$3M	7 IP titles delivered to customer with total value of \$4M	3 IP titles delivered to customer with total value of \$2M
Revenue Recognized:			
Under previous ASC 605 rules:	\$3M <i>(1/3 of 3-year contract)</i>	\$3M <i>(1/3 of 3-year contract)</i>	\$3M <i>(1/3 of 3-year contract)</i>
Under new ASC 606 rules:	\$3M <i>(value of IP used in period)</i>	\$4M <i>(value of IP used in period)</i>	\$2M <i>(value of IP used in period)</i>

VIII. RECONCILIATIONS AND ADJUSTMENTS

SUPPLEMENTAL GAAP TO NON-GAAP INFORMATION – ASC 606 ⁽¹⁾

(Unaudited and in thousands, except per share amounts)

	Three Months Ended April 30, 2019		
	GAAP	Adjustments ⁽²⁾	Non-GAAP
Cost of revenue:			
Products	\$ 116,010	\$ (5,397)	\$ 110,613
Maintenance and service	59,788	(1,877)	57,911
Amortization of intangible assets	14,881	(14,881)	-
Operating expenses:			
Research and development	\$ 290,299	\$ (28,709)	\$ 261,590
Sales and marketing	158,652	(10,277)	148,375
General and administrative	56,351	(8,434)	47,917
Amortization of intangible assets	10,316	(10,316)	-
Restructuring	14,443	(14,443)	-
Operating income	\$ 115,502	\$ 94,334	\$ 209,836
Other income (expense), net	\$ 18,415	\$ (16,225)	\$ 2,190
Provision (benefit) for income taxes	\$ 15,707	\$ 18,217	\$ 33,924
Net income	\$ 118,210	\$ 59,892	\$ 178,102
Net income per share (Diluted)	\$ 0.77	\$ 0.39	\$ 1.16
Shares used in computing per share amounts:			
Diluted	153,904		153,904

(1) Synopsys' second quarter of fiscal year 2019 ended on May 4, 2019. For presentation purposes, we refer to the closest calendar month end.

(2) The adjustments to the various line items resulted from excluding the following from non-GAAP measures: stock compensation of \$36.9 million, amortization of intangible assets of \$25.2 million, restructuring charge of \$14.4 million, acquisition-related costs of \$1.6 million, changes in the fair value of the non-qualified deferred compensation plan of \$16.2 million, tax settlement of \$17.4 million, and tax effect of non-GAAP adjustments of \$35.7 million.

GAAP TO NON-GAAP OPERATING MARGIN RECONCILIATION – ASC 606 ⁽¹⁾

(Unaudited)

	Three Months Ended April 30, 2019
GAAP operating margin	13.8 %
Amortization of intangible assets	3.0 %
Stock compensation	4.4 %
Acquisition-related costs	0.2 %
Restructuring	1.7 %
Legal matters	- %
Change in value of non-qualified deferred compensation	2.0 %
Non-GAAP operating margin	<u>25.1 %</u>

(1) Synopsys' second quarter of fiscal year 2019 ended on May 4, 2019. For presentation purposes, we refer to the closest calendar month end.

TOTAL ADJUSTED SEGMENT OPERATING INCOME RECONCILIATION ^{(1) (2)}

(in millions)

	Three Months Ended	
	April 30, 2019 ⁽³⁾	
	ASC 606	
GAAP total operating income – as reported	\$	115.5
Other expenses managed at consolidated level		
-Amortization of intangible assets		25.2
-Stock compensation		36.9
-Fair value changes in executive deferred compensation plan		16.2
-Acquisition-related costs		1.6
-Restructuring		14.4
-Legal matters		-
Total adjusted segment operating income	\$	209.8

(1) Synopsys manages the business on a long-term, annual basis, and considers quarterly fluctuations of revenue and profitability as normal elements of our business. Quarterly variability, which increases as a result of ASC 606, should be expected.

(2) These segment results are consistent with the information required by ASC 280, Segment Reporting. They are presented to reflect the information that is considered by Synopsys' chief operating decision maker (CODM) to evaluate the operating performance of its segments. The CODM does not allocate certain operating expenses managed at a consolidated level to our reportable segments, and as a result, the reported operating income and operating margin do not include these unallocated expenses as shown in the table above. Amounts may not foot due to rounding.

(3) Synopsys' second quarter of fiscal year 2019 ended on May 4, 2019, and its fiscal year 2018 ended on November 3, 2018. For presentation purposes, we refer to the closest calendar month end.

UNAUDITED RECONCILIATION OF CONSOLIDATED STATEMENT OF OPERATIONS UNDER ASC 606 AND ASC 605 ⁽¹⁾

(in thousands, except per share amounts)

	Three Months Ended April 30, 2019		
	As reported under ASC 606	Adjustments	Balances under ASC 605
Revenue:			
Time-based products	\$ 558,305	\$ 86,762	\$ 645,067
Upfront products	143,401	(61,057)	82,344
Maintenance and service	134,536	(9,379)	125,157
Total revenue	<u>836,242</u>	<u>16,326</u>	<u>852,568</u>
Cost of revenue:			
Products	116,010		116,010
Maintenance and service	59,788		59,788
Amortization of intangible assets	14,881		14,881
Total cost of revenue	<u>190,679</u>	<u>-</u>	<u>190,679</u>
Gross margin	645,563	16,326	661,889
Operating expenses:			
Research and development	290,299		290,299
Sales and marketing	158,652	1,942	160,594
General and administrative	56,351		56,351
Amortization of intangible assets	10,316		10,316
Restructuring	14,443		14,443
Total operating expenses	<u>530,061</u>	<u>1,942</u>	<u>532,003</u>
Operating income	115,502	14,384	129,886
Other income (expense), net	18,415	-	18,415
Income before income taxes	133,917	14,384	148,301
Provision (benefit) for income taxes	15,707	2,599	18,306
Net income	<u>\$ 118,210</u>	<u>\$ 11,785</u>	<u>\$ 129,995</u>
Net income per share:			
Basic	\$ 0.79	\$ 0.08	\$ 0.87
Diluted	\$ 0.77	\$ 0.07	\$ 0.84
Shares used in computing per share amounts:			
Basic	<u>149,712</u>		<u>149,712</u>
Diluted	<u>153,904</u>		<u>153,904</u>

(1) Synopsys' second quarter of fiscal year 2019 ended on May 4, 2019. For presentation purposes, we refer to the closest calendar month end.

GAAP TO NON-GAAP RECONCILIATION OF THIRD QUARTER FISCAL YEAR 2019 TARGETS ⁽¹⁾

(in thousands, except per share amounts)

	ASC 606	
	Range for Three Months	
	Ending July 31, 2019 ⁽²⁾	
	Low	High
Target GAAP expenses	\$ 700,000	\$ 746,000
Adjustments:		
Estimated impact of amortization of intangible assets	(23,000)	(26,000)
Estimated impact of stock compensation	(37,000)	(40,000)
Estimated impact of restructuring	(20,000)	(40,000)
Target non-GAAP expenses	\$ 620,000	\$ 640,000

	ASC 606	
	Range for Three Months	
	Ending July 31, 2019 ⁽²⁾	
	Low	High
Target GAAP earnings per share	\$ 0.60	\$ 0.83
Adjustments:		
Estimated impact of amortization of intangible assets	0.17	0.15
Estimated impact of stock compensation	0.26	0.24
Estimated impact of restructuring	0.26	0.13
Estimated impact of tax adjustments	(0.22)	(0.23)
Target non-GAAP earnings per share	\$ 1.07	\$ 1.12

Shares used in non-GAAP calculation (midpoint of target range) 154,500 154,500

GAAP TO NON-GAAP RECONCILIATION OF FULL FISCAL YEAR 2019 TARGETS ⁽¹⁾

(in thousands, except per share amounts)

	ASC 606	
	Range for Fiscal Year	
	October 31, 2019 ⁽²⁾	
	Low	High
Target GAAP expenses	\$ 2,797,666	\$ 2,852,666
Adjustments:		
Estimated impact of amortization of intangible assets	(98,000)	(103,000)
Estimated impact of stock compensation	(155,000)	(160,000)
Acquisition-related costs	(2,152)	(2,152)
Estimated impact of restructuring	(35,000)	(60,000)
Legal matters	18,000	18,000
Fair value changes in executive deferred compensation plan	(20,514)	(20,514)
Target non-GAAP expenses	\$ 2,505,000	\$ 2,525,000

	ASC 606	
	Range for Fiscal Year	
	October 31, 2019 ⁽²⁾	
	Low	High
Target GAAP earnings per share	\$ 2.85	\$ 3.27
Adjustments:		
Estimated impact of amortization of intangible assets	0.67	0.63
Estimated impact of stock compensation	1.04	1.00
Acquisition-related costs	0.01	0.01
Estimated impact of restructuring	0.39	0.23
Legal matters	(0.12)	(0.12)
Tax settlement	0.11	0.11
Estimated impact of tax adjustments	(0.71)	(0.73)
Target non-GAAP earnings per share	\$ 4.24	\$ 4.40

Shares used in non-GAAP calculation (midpoint of target range) 154,500 154,500

(1) Synopsys adopted new revenue recognition guidance ASC 606, Revenue from Contracts with Customers, at the beginning of fiscal 2019 under the modified retrospective method.

(2) Synopsys' third fiscal quarter and fiscal year will end on August 3, 2019 and November 2, 2019, respectively. For presentation purposes, we refer to the closest calendar month end.

GAAP TO NON-GAAP RECONCILIATION OF OPERATING MARGIN AT MIDPOINT OF FULL FISCAL YEAR 2019 TARGETS ⁽¹⁾

	ASC 606 October 31, 2019 ^{(2),(3)}
At midpoint of revenue and expense guidance ranges:	
GAAP operating margin	14.9%
Amortization of intangible assets	3.0%
Stock compensation	4.7%
Acquisition-related costs	0.1%
Restructuring	1.4%
Legal matters	-0.5%
Change in value of non-qualified deferred compensation	0.6%
Non-GAAP operating margin	<u>24.2%</u>

(1) Synopsys adopted new revenue recognition guidance ASC 606, *Revenue from Contracts with Customers*, at the beginning of fiscal 2019 under the modified retrospective method.

(2) Synopsys' fiscal year will end on November 2, 2019. For presentation purposes, we refer to the closest calendar month end.

(3) These numbers represent the midpoint of targets in the prepared remarks provided on February 20, 2019, and do not represent official guidance for 2019.

GAAP TO NON-GAAP RECONCILIATION OF ASC 605 COMPARATIVE AMOUNTS ⁽¹⁾

(in thousands, except per share amounts)

	ASC 605 Range for Fiscal Year October 31, 2019 ⁽²⁾	
	Low	High
Target GAAP earnings per share	\$ 3.05	\$ 3.47
Adjustments:		
Estimated impact of amortization of intangible assets	0.67	0.63
Estimated impact of stock compensation	1.04	1.00
Acquisition-related costs	0.01	0.01
Estimated impact of restructuring	0.39	0.23
Legal matters	(0.12)	(0.12)
Tax settlement	0.11	0.11
Estimated impact of tax adjustments	(0.71)	(0.73)
Target non-GAAP earnings per share	<u>\$ 4.44</u>	<u>\$ 4.60</u>
Shares used in non-GAAP calculation (midpoint of target range)	154,500	154,500

(1) Synopsys adopted new revenue recognition guidance ASC 606, *Revenue from Contracts with Customers*, at the beginning of fiscal 2019 under the modified retrospective method. For comparison purposes, we provide comparative amounts under old revenue guidance ASC 605, *Revenue Recognition*.

(2) Synopsys' fiscal year will end on November 2, 2019. 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 May 22, 2019 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 first quarter of fiscal 2019 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 May 22, 2019. 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, financial targets for the third quarter and full fiscal year 2019, their comparative metrics under ASC 605, and GAAP to non-GAAP reconciliations of projections, as well as statements related to our long-term revenue, non-GAAP EPS and non-GAAP operating margin objectives, the expected impact of ASC 606, discrete items in fiscal year 2019, the expected normalized tax rate, and , and the expected impact of the recent U.S. government action on Synopsys' fiscal 2019 results. 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: additional administrative, legislative or regulatory action by the U.S. or foreign governments, such as the imposition of additional tariffs or export restrictions, which could further interfere with our ability to provide products and services in certain countries; the response by current or potential customers and their willingness to purchase products and services from us in the future; 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; 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; our highly competitive industries and our ability to meet our customers' demand for innovative technology at lower costs; risks and compliance obligations relating to the global nature of our operations; cybersecurity threats or other security breaches; our ability to protect our proprietary technology; our ability to realize the potential financial or strategic benefits of acquisitions we complete; our ability to carry out our new product and technology initiatives; investment of more resources in research and development than anticipated; increased risks resulting from an increase in sales of our hardware products, including increased variability in upfront revenue; changes in accounting principles or standards; changes in our effective 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; 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; the inherent limitations on the effectiveness of our controls and compliance programs; the impairment of our investment portfolio by the deterioration of capital markets; 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, 2018 and in its latest Quarterly Report on Form 10-Q.

EFFECTIVENESS OF INFORMATION

The information provided herein is as of May 22, 2019. Although this Supplement will remain available on Synopsys' website through the date of the third quarter of fiscal 2019 earnings call in August 2019, 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 second quarter of fiscal 2019 or comment to analysts or investors on, or otherwise update, the information contained in this Supplement.