FINANCIAL SUPPLEMENT Q2 FY2020

May 20, 2020

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I. FISCAL YEAR 2020 SELECTED FINANCIAL TARGETS (1) (2)

	Q3FY2020	FY2020
Revenue (million)	$875 - $905	$3,600 - $3,650
GAAP Expenses (million)	$721 - $737	$2,991 - $3,031
Non-GAAP Expenses (million)	$640 - $650	$2,630 - $2,660
Other Income and Expense Net (million)	($5) – ($3)	($11) - ($7)
Annual Non-GAAP Tax Rate	16%	16%
Fully Diluted Outstanding Shares (million)	153 - 156	153 - 156
Implied GAAP Operating Margin at Midpoint		~17%
Implied Non-GAAP Operating Margin at Midpoint		~27%
GAAP Earnings Per Share	$1.12 - $1.22	$3.74 - $3.90
Non-GAAP Earnings Per Share	$1.33 - $1.38	$5.21 - $5.28
Cash Flow from Operations (million)		$815 - $840
Capital Expenditures (million)		~$170
Average Renewable License Duration		~3 years
Stock-Based Compensation (million)		~$229

(1) These targets were provided by Synopsys as of May 20, 2020.
(2) These targets assume that the current U.S. government "Entity List" restrictions remain in place for the rest of the fiscal year.

RECENT ACQUISITIONS

Tinfoil Security

- Closed January 2020.
- Terms not disclosed; not material
- Expands our DAST portfolio and adds API testing capabilities, further strengthening our technology lead in application security and quality testing.

INVECAS Asset Acquisition

- Closed February 2020.
- Terms not disclosed; not material.
- Broadens DesignWare Logic Library, Embedded Memory, Interface & Analog IP portfolio for consumer, IoT and automotive designs; adds R&D team to accelerate physical IP roadmap across range of process technologies.

II. REVENUE BY PRODUCT GROUP (Unaudited)

($ millions)	Q119	Q219	Q319	Q419	FY19	Q120	Q220
EDA	500.8	492.7	481.6	489.2	1,964.3	492.6	511.4
% of Revenue	*61%*	*59%*	*56%*	*57%*	*58%*	*59%*	*59%*
IP & System Integration	235.8	259.2	286.2	275.5	1,056.6	255.1	260.0
% of Revenue	*29%*	*31%*	*34%*	*32%*	*31%*	*31%*	*30%*
Software Integrity	82.5	83.2	83.6	85.3	334.6	85.6	88.3
% of Revenue	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
Other	1.3	1.1	1.6	1.1	5.2	1.1	1.7
Total	**820.4**	**836.2**	**853.0**	**851.1**	**3,360.7**	**834.4**	**861.3**

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.

III. REVENUE BY GEOGRAPHIC REGION (Unaudited)

($ millions)	Q119	Q219	Q319	Q419	FY19	Q120	Q220
North America	414.5	433.9	414.0	450.0	1,712.5	415.4	405.8
% of Revenue	*51%*	*52%*	*49%*	*53%*	*51%*	*50%*	*47%*
Europe	83.9	83.5	90.1	91.5	349.0	94.4	89.3
% of Revenue	*10%*	*10%*	*11%*	*11%*	*10%*	*11%*	*10%*
Japan	65.1	72.7	65.7	69.2	272.7	72.2	80.5
% of Revenue	*8%*	*9%*	*8%*	*8%*	*8%*	*9%*	*9%*
Korea	102.7	84.9			353.4	89.5	105.3
% of Revenue	*13%*	*10%*			*11%*	*11%*	*12%*
Asia Pacific	154.2	161.2	283.2	240.3	673.2	162.9	180.4
% of Revenue	*19%*	*19%*	*33%*	*28%*	*20%*	*20%*	*21%*
Total	**820.4**	**836.2**	**853.0**	**851.1**	**3,360.7**	**834.4**	**861.3**

* We began reporting revenue from Korea separate from Asia Pacific revenue at the conclusion of fiscal 2019. Revenue from Korea is reported separately from Asia Pacific revenue for the first and second quarters of fiscal 2019 for comparative purposes.

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.

IV. SELECTED FINANCIAL AND OPERATING METRICS

	Q119	Q219	Q319	Q419	FY19	Q120	Q220
Revenue License Type (millions) (1)							
- Time-based Products	$553.7	$558.3	$537.6	$548.4	$2,198.0	$556.4	$590.1
- Upfront Products	$130.5	$143.4	$177.6	$168.3	$619.8	$150.7	$129.8
- Maintenance and Service (2)	$136.2	$134.5	$137.8	$134.4	$542.9	$127.2	$141.5
Recurring Revenue (% of Total Revenue) (3)	*89%*	*90%*	*88%*	*89%*	*89%*	*87%*	*90%*
Avg Renewable License Duration (yrs) (4)	~2.9	~2.7	~2.4	~2.7	~2.7	~2.5	~3.2
Non-GAAP Operating Margin (5)	24.5%	25.1%	25.4%	24.8%	25.0%	22.4%	25.7%
Cash, Cash Equivalents & Short-term Investments (millions)	$592	$631	$687	$729	$729	$700	$856
- % held in U.S.	23%	28%	24%	26%	26%	31%	36%
Outstanding Debt	$542	$292	$142	$138	$138	$331	$236
Operating Cash Flow (1),(6)	($144)	$353	$370	$221	$801	$10	$380
Capital Expenditures (1)	$29	$40	$53	$76	$198	$55	$26
Share Repurchases (millions) (1)							
- Number of Shares	0.3	0.8	0.8	0.8	2.7	0.6	0.7
- Gross Share Repurchases	($29)	($100)	($100)	($100)	($329)	($100)	($100)
- Remaining Repurchase Authorization	$296	$196	$500	$400	$400	$300	$200
DSO	85	57	49	59		87	67
Employee Headcount	~13,450	~13,580	~13,860	~13,895		~14,280	~14,500
Revenue by Segment (millions) (7)(8)							
- Semiconductor & System Design	$737.9	$753.0	$769.4	$765.8	$3,026.1	$748.8	$773.0
% of Total	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*	*90%*
- Software Integrity	$82.5	$83.2	$83.6	$85.3	$334.6	$85.6	$88.3
% of Total	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
Adjusted Op Income by Segment (millions) (7)(8)							
- Semiconductor & System Design	$195.3	$201.4	$207.8	$202.1	$806.6	$178.9	$209.7
- Software Integrity	$5.6	$8.4	$8.8	$9.4	$32.2	$8.1	$11.7
Adjusted Operating Margin by Segment (7)(8)							
- Semiconductor & System Design	26.5%	26.8%	27.0%	26.4%	26.7%	23.9%	27.1%
- Software Integrity	6.8%	10.1%	10.5%	11.0%	9.6%	9.4%	13.3%

(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 20, 2020 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.

(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 increased 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 makers (CODMs) to evaluate the operating performance of its segments. The CODMs do 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. Management excludes these same expenses to arrive at non-GAAP measures used to evaluate and make decisions about Synopsys as a whole.

V. RECONCILIATIONS AND ADJUSTMENTS

SUPPLEMENTAL GAAP TO NON-GAAP INFORMATION [(1)]

(Unaudited and in thousands, except per share amounts)

	Three Months Ended April 30, 2020		
	GAAP	Adjustments [(2)]	Non-GAAP
Cost of revenue:			
Products	$ 108,207	$ (4,405)	$ 103,802
Maintenance and service	62,213	(1,799)	60,414
Amortization of intangible assets	13,845	(13,845)	-
Operating expenses:			
Research and development	$ 302,571	$ (18,432)	$ 284,139
Sales and marketing	146,200	(6,034)	140,166
General and administrative	62,474	(11,072)	51,402
Amortization of intangible assets	10,250	(10,250)	-
Restructuring charges	29,672	(29,672)	-
Operating income	$ 125,895	$ 95,509	$ 221,404
Other income (expense), net	$ (15,729)	$ 18,460	$ 2,731
Provision (benefit) for income taxes	$ 246	$ 35,616	$ 35,862
Net income	$ 109,920	$ 78,353	$ 188,273
Net income per share (Diluted)	$ 0.71	$ 0.51	$ 1.22
Shares used in computing per share amounts:			
Diluted	154,379		154,379

(1) Synopsys' second quarter of fiscal year 2020 ended on May 2, 2020. 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 $56.4 million, restructuring charges of $29.7 million, amortization of intangible assets of $24.1 million, changes in the fair value of the non-qualified deferred compensation plan of $18.5 million, acquisition-related costs of $3.8 million, and tax effect of non-GAAP adjustments of ($35.6) million.

GAAP TO NON-GAAP OPERATING MARGIN RECONCILIATION [(1)]

(Unaudited)

	Three Months Ended April 30, 2020
GAAP operating margin	14.6%
Amortization of intangible assets	2.8%
Stock compensation	6.6%
Acquisition-related costs	0.4%
Restructuring charges	3.4%
Change in value of non-qualified deferred compensation	-2.1%
Non-GAAP operating margin	25.7%

(1) Synopsys' second quarter of fiscal year 2020 ended on May 2, 2020. 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, 2020 (3)
GAAP total operating income – as reported	$ 125.9
Other expenses managed at consolidated level	
-Amortization of intangible assets	24.1
-Stock compensation	56.4
-Fair value changes in executive deferred compensation plan	(18.5)
-Acquisition-related costs	3.8
-Restructuring	29.7
-Legal matters	-
Total adjusted segment operating income	221.4

(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 makers (CODMs) to evaluate the operating performance of its segments. The CODMs do 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 2020 and 2019 ended on May 2, 2020 and May 4, 2019, respectively. For presentation purposes, we refer to the closest calendar month end.

GAAP TO NON-GAAP RECONCILIATION OF THIRD QUARTER FISCAL YEAR 2020 TARGETS [1]

(in thousands, except per share amounts)

	Range for Three Months Ending July 31, 2020	
	Low	High
Target GAAP expenses	$ 721,000	$ 737,000
Adjustments:		
Estimated impact of amortization of intangible assets	(23,000)	(26,000)
Estimated impact of stock compensation	(58,000)	(61,000)
Target non-GAAP expenses	$ 640,000	$ 650,000

	Range for Three Months Ending July 31, 2020	
	Low	High
Target GAAP earnings per share	$ 1.12	$ 1.22
Adjustments:		
Estimated impact of amortization of intangible assets	0.17	0.15
Estimated impact of stock compensation	0.39	0.38
Estimated impact of tax adjustments	(0.35)	(0.37)
Target non-GAAP earnings per share	$ 1.33	$ 1.38
Shares used in non-GAAP calculation (midpoint of target range)	154,500	154,500

GAAP TO NON-GAAP RECONCILIATION OF FULL FISCAL YEAR 2020 TARGETS [1]

(in thousands, except per share amounts)

	Range for Fiscal Year October 31, 2020	
	Low	High
Target GAAP expenses	$ 2,990,968	$ 3,030,968
Adjustments:		
Estimated impact of amortization of intangible assets	(89,000)	(94,000)
Estimated impact of stock compensation	(226,000)	(231,000)
Acquisition-related costs	(7,545)	(7,545)
Estimated impact of restructuring charges	(38,423)	(38,423)
Target non-GAAP expenses	$ 2,630,000	$ 2,660,000

	Range for Fiscal Year October 31, 2020	
	Low	High
Target GAAP earnings per share	$ 3.74	$ 3.90
Adjustments:		
Estimated impact of amortization of intangible assets	0.61	0.58
Estimated impact of stock compensation	1.50	1.46
Acquisition-related costs	0.05	0.05
Estimated impact of restructuring charges	0.25	0.25
Impact of tax adjustments	(0.94)	(0.96)
Target non-GAAP earnings per share	$ 5.21	$ 5.28
Shares used in non-GAAP calculation (midpoint of target range)	154,500	154,500

(1) Synopsys' third fiscal quarter and fiscal year will end on August 1, 2020 and October 31, 2020, 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 2020 TARGETS [1]

	Twelve Months Ended October 31, 2020
At midpoint of revenue and expense guidance ranges	
GAAP operating margin	16.9%
Amortization of intangible assets	2.5%
Stock compensation	6.3%
Acquisition-related costs	0.2%
Restructuring charges	1.1%
Target non-GAAP expenses	27.0%

(1) These numbers represent the midpoint of targets in the prepared remarks provided on May 20, 2020, and do not represent official guidance for 2020.

NOTICE TO INVESTORS

GAAP TO NON-GAAP RECONCILIATIONS

Please see our Current Report on Form 8-K filed with the SEC on May 20, 2020 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 second quarter of fiscal 2020 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 20, 2020. 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 2020, the GAAP to non-GAAP reconciliations of such financial targets, the expected impact of U.S. and foreign government action on Synopsys' financial results, and the expected impact of the COVID-19 pandemic. 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: risks from the effect of the COVID-19 pandemic and the associated economic downturn on our business, operations and financial condition, including the ability to secure timely payment from customers, the ability to accurately estimate customer demand, reduced willingness of current and potential customers to purchase our products and services due to their own business and market uncertainties, the ability of our business partners and third-party providers to fulfill their responsibilities and commitments, the ability to secure adequate and timely supply of equipment and materials from suppliers for our hardware products, and the ability to develop and deliver our products; the anticipated timing and customer adoption of our new product offerings; action 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, which could interfere with our business operations or our ability to provide products and services in certain countries; 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; 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; our highly competitive industries and our ability to meet our customers' demand for innovative technology at lower costs; 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; product errors or defects; 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; 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, 2019 and in its latest Quarterly Report on Form 10-Q.

EFFECTIVENESS OF INFORMATION

The information provided herein is as of May 20, 2020. Although this Supplement will remain available on Synopsys' website through the date of the third quarter of fiscal 2020 earnings call in August 2020, 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 third quarter of fiscal 2020 or comment to analysts or investors on, or otherwise update, the information contained in this Supplement.