Synopsys Inc. (SNPS)

$199.39 (As of 07/06/20)

Price Target (6-12 Months): **$209.00**

Long Term: 6-12 Months	**Zacks Recommendation:**	**Neutral**
	(Since: 07/24/19)	
	Prior Recommendation: Outperform	
Short Term: 1-3 Months	**Zacks Rank:** (1-5)	**3-Hold**
	Zacks Style Scores:	VGM:B
	Value: C | Growth: B | Momentum: C	

Summary

Synopsys is benefiting from strong design wins owing to a robust product portfolio. Growth in work-from-home and e-learning trends induced by the coronavirus pandemic is driving demand for bandwidth. Moreover, strong traction for Synopsys' Fusion Compiler product boosted the top line. Growing demand for advanced technology, design, IP and security solutions is also creating solid prospects. Moreover, rising impact of AI, 5G, IoT and big data is driving investments in new compute and ML architectures. Shares have outperformed the industry year-to-date. However, supply-chain disruptions stemming from the pandemic are a headwind. The company is also witnessing stiff competition. Moreover, geopolitical challenges coupled with uncertainties related to restrictions over trade with Huawei are other woes.
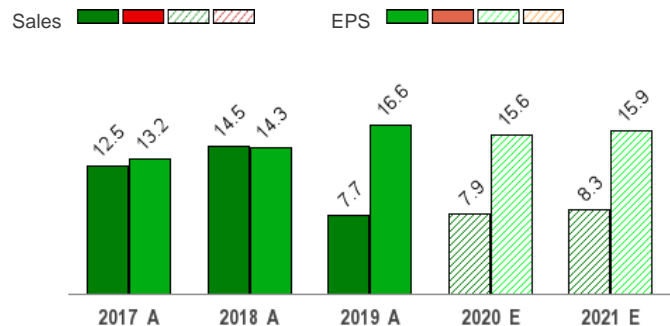
Price, Consensus & Surprise

Data Overview

52 Week High-Low	**$202.98 - $104.90**
20 Day Average Volume (sh)	**935,265**
Market Cap	**$30.0 B**
YTD Price Change	**43.2%**
Beta	**1.18**
Dividend / Div Yld	**$0.00 / 0.0%**
Industry	**Computer - Software**
Zacks Industry Rank	**Bottom 40% (150 out of 251)**
Last EPS Surprise	**23.2%**
Last Sales Surprise	**2.9%**
EPS F1 Est- 4 week change	**0.0%**
Expected Report Date	**08/19/2020**
Earnings ESP	**0.0%**
P/E TTM	**43.7**
P/E F1	**37.8**
PEG F1	**3.4**
P/S TTM	**8.8**

Sales and EPS Growth Rates (Y/Y %)

Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2021	944 E	965 E	989 E	1,037 E	3,928 E
2020	834 A	861 A	894 E	1,038 E	3,627 E
2019	820 A	836 A	853 A	851 A	3,361 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	$1.39 E	$1.47 E	$1.55 E	$1.76 E	$6.11 E
2020	$1.01 A	$1.22 A	$1.35 E	$1.70 E	$5.27 E
2019	$1.08 A	$1.16 A	$1.18 A	$1.15 A	$4.56 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 07/06/2020. The reports text is as of 07/07/2020.

Overview

Synopsys is a vendor of electronic design automation (EDA) software to the semiconductor and electronics industries. The company offers a full suite of products used in the logic synthesis and functional verification phases of chip design, including a broad array of reusable design building blocks. It also sells physical synthesis and physical design products as well as physical verification products.

The company's products are used to design a chip, from concept to the point of delivery to the manufacturer for fabrication. Synopsis provides software and hardware, which are used to develop electronic systems that incorporate chips. Additionally, the company provides Intellectual Property (IP) used in semiconductor design and manufacturing to simplify the design process and accelerate time-to-market for its customers.

Synopsis reports revenues in three segments, namely Time-Based Products, Upfront Products and Maintenance and Service.

Time-Based Products (66% of fiscal 2019 revenues): Segment revenues are recognized as Technology Subscription License (TSL) revenues. Under this segment, the company recognizes revenues from fees over the period of the license or as and when the installments are paid by the customer, whichever is later.

EPS Hist. and Est.

Sales Hist. and Est.

Upfront Products (18%): These revenues are recognized as Term License revenues. Under this segment, the company recognizes revenues from term licenses in full after the completion of the shipment of the software, wherein at least 75% of the license fee is paid within a year of shipment, after fulfilling all other revenue recognition criteria.

Maintenance and Service (16%): Under this segment revenues come from maintenance fees that are generated over the maintenance period; along with revenues generated from professional service and training fees.

The company conducts its business across four geographic regions namely: The United States (51% of fiscal 2019 revenues), Asia-Pacific and Others (31%), Europe (10%) and Japan (8%).

Synopsys' competitors include EDA vendors like Cadence Design Systems Inc. and Mentor Graphics Corporation.
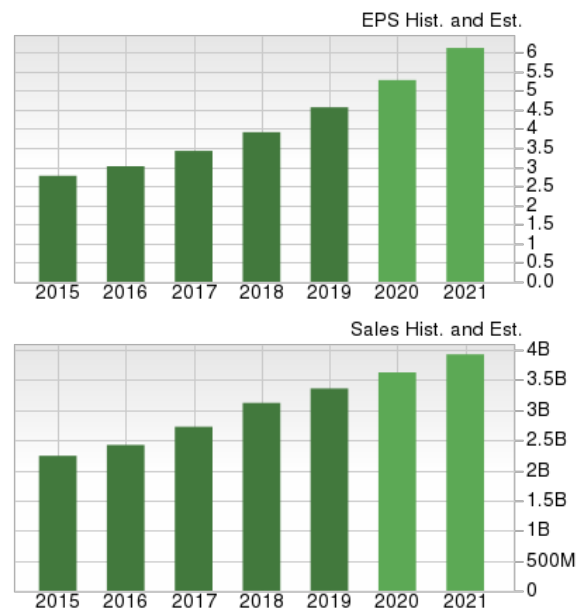
Reasons To Buy:

▲ In the current economic scenario, as customers are strengthening their supplier relationships and focusing on cost efficiencies, many have selected Synopsys as their primary EDA partner. Relationships with companies such as Advanced Micro Devices, Juniper Networks, Realtek, Teradici, NetLogic Microsystems, Toshiba and Wolfson stand as evidence.

▲ Synopsys' penetration into new and growing artificial intelligence (AI) chip companies is a major growth driver. Further, with the growing need for enhanced security measures considering the rising security threats in interconnected systems laden with software, demand for the company's solutions is shooting up. Robust growth in software-based verification at both traditional semiconductor as well as emerging system companies focused on own in-house design is an upside. Notably, Fusion Design Platform, launched last November, is witnessing high demand, which is helping it generate strong results. The company's Verification Continuum platform steadily witnesses excellent demand and competitive wins. Further, ZeBu Server 4 product is generating a broad-based adoption by customers' designing storage, networking and AI chips.

▲ Synopsys has also made a few important acquisitions to build its product portfolio and stimulate growth. Acquisitions are central to the company's growth strategy and are helping it to gain access to newer markets and technologies. Also, since intense competition is making the EDA market tougher to penetrate, acquisitions have helped the company to boost revenues. Notably, the acquisitions of Cigital and Black Duck are establishing tactical quality relations with clients, leading to higher demand creation, cross-selling and a substantial rise in brand recognition.

▲ Synopsys is considered as a lower-leveraged company. Its total debt-to-total capital ratio of 0.15 is significantly lower than the industry average of 0.43. As of Apr 30, 2020, the company's total debts (including current maturities) were $235.8 million while its cash and equivalents were $856.4 million. Moreover, the company's strong cash-flow generation capability is noteworthy. In the trailing 12 month, Synopsys has generated operating and free cash flows of $981 million and $526 million, respectively. Notably, the company's operating cash flows have grown significantly from $495 million in fiscal 2015 to $801 million in fiscal 2019.

▲ Synopsys returns cash to investors through share repurchases. According to the company, accelerated share repurchase (ASR) arrangements are an integral element of its overall framework for enhancing investors' worth. The company completed buybacks of $329 million in fiscal 2019 and $1.8 billion over the past five years, returning approximately 75% of free cash flow to its investors over that period. Additionally, in late February 2020, the company initiates an accelerated share repurchase (ASR) program worth $100 million, which was completed as of May 15, 2020.

The company's recent product launches, acquisitions and deal wins will boost results. Also, unique intellectual properties and global support provided by the company are other positives.

Reasons To Sell:

▼ The company faces tough competition from EDA vendors such as Cadence Design Systems Inc. and Mentor Graphics Corporation. These companies offer products focused more on distinct phases of the IC design process and provide a range of services to companies throughout the world to help optimize their product development process, among other things.Their facilities could increase competition, leading to lower prices and profits for Synopsys.

Escalating costs and expenses, intense competition and uncertainty regarding the timeline for realization of acquisition synergies remain headwinds.

▼ The company also faces customer concentration risk, as small number of large customers account for significant portion of its revenues. Depending on a small number of customers for a large chunk of revenues could be risky, as loss of a single customer could affect operating performance significantly and jeopardize results. Therefore, the company is always under pressure to improve and maintain customer relations. As a result, the company needs to put more effort on customer retention through constant innovative product launches.

▼ A substantial portion of the company's sales is derived from outside the U.S. Hence, we believe that any unfavorable currency fluctuations and an uncertain macroeconomic environment may temper its growth prospects.

▼ Synopsys currently has a trailing 12 month P/E ratio of 50.8. This level compares unfavorably to some extent with what the industry saw over the last year. Hence, valuation looks slightly stretched from a P/E perspective.

Last Earnings Report

Synopsys Q2 Earnings and Revenues Surpass Estimates

Synopsys second-quarter fiscal 2020 non-GAAP earnings of $1.22 per share beat the Zacks Consensus Estimate by 23.2%. Moreover, the figure improved 5.2% year over year.

Further, revenues increased 3% year over year to $861.3 million and surpassed the Zacks Consensus Estimate by 2.9%.

Growth in work-from-home and e-learning trends induced by the coronavirus pandemic is driving demand for bandwidth, which drove the company's fiscal second-quarter performance. Moreover, strong traction for Synopsys' Fusion Compiler product boosted the top line.

However, supply-chain disruptions stemming from the pandemic are a headwind.

Quarter Ending	04/2020
Report Date	**May 20, 2020**
Sales Surprise	**2.92%**
EPS Surprise	**23.23%**
Quarterly EPS	**1.22**
Annual EPS (TTM)	**4.56**

Quarter in Detail

Time-Based Product revenues (68.5% of total revenues) of $590.1 million were up 5.7% year over year. Moreover, Maintenance and Service revenues (15.2%) improved 5.2% to $141.5 million. However, Upfront Product revenues (15.1%) declined 9.5% to $129.8 million.

Segment wise, Semiconductor & System Design revenues (89.7% of total) were $773 million, up 2.7% year over year. The upside was driven by strong growth in IP. Within the same, EDA revenues (59% of revenues) were $511.4 million and IP & Systems Integration revenues (30% of revenues) were $260 million.

Software Integrity revenues were 88.3 million, contributing approximately 10% to the top line in the reported quarter.

Geographically, Synopsys' revenues in North America (47% of total) were $405.8 million, while that in Europe (10%) was $89.3 million. Revenues from Japan (9%), Korea (12%) and the Asia Pacific (21%) were $80.5 million, $105.3 million and $180.4 million, respectively.

Non-GAAP operating margin was 25.7%, expanding 60 basis points (bps) year over year. Semiconductor & System Design delivered an adjusted operating margin of 27.9%, up 30 bps year over year, while Software Integrity margin expanded 320 bps year over year to 13.3%.

Balance Sheet & Cash Flow

Synopsys had cash and cash equivalents of $856.4 million as of Apr 30, compared with $700.4 million as of Jan 31.

Total debt came in at $235.8 million in the reported quarter compared with $331.1 million in the previous quarter.

Operating cash flow for the quarter was $9.8 million, flat on a sequential basis.

Guidance

For third-quarter fiscal 2020, the company's revenues are expected to be $875-$905 million. The Zacks Consensus Estimate for revenues is currently pegged at $931.8 million, which indicates growth of 9.3% from the year-ago quarter's reported figure.

Management expects non-GAAP earnings between $1.33 and $1.38 per share. The consensus mark for earnings is pegged at $1.42 cents, which suggests year-over-year growth of 20.3%.

Non-GAAP expenses are anticipated to be $640-$650 million.

For fiscal 2020, revenues are now projected in the range of $3.60-$3.65 billion. The Zacks Consensus Estimate for fiscal 2020 is pegged at $3.62 billion, which indicates year-over-year growth of 7.6%.

Non-GAAP earnings for the period are expected between $5.21 and $5.28 per share. The consensus mark for 2020 earnings is pegged at $5.21, which suggests growth of 14.3% from the year-ago quarter's figure.

Synopsys still expects operating-margin expansion of 2 percentage points for the fiscal year.

For fiscal 2020, operating cash flow is expected between $815 million and $840 million.

Recent News

On May 21, Synopsys announced that document-related solutions and services provider Fuji Xerox, has adopted the Synopsys ZeBu Server emulation system for software development and performance enhancement of the latter company's next-generation multifunction printer system-on-chip (SoC).

On Apr 13, Synopsys' ZeBu Server 4 product is generating a broad-based adoption by customers' designing storage, networking and AI chips. Recently, the company announced that Groq has adopted the ZeBu Server 4 emulation solution to develop its Tensor Streaming Processor (TSP).

On Jan 7, 2020, Synopsys announced the acquisition of certain assets of INVECAS IP, to broaden its DesignWare Logic Library, General Purpose I/O, Embedded Memory, Interface and Analog IP portfolio.

Valuation

Synopsys shares are up 31.1% in the year-to-date (YTD) period while is up 61.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector have increased 12.1% and 5% YTD, respectively. Over the past year, while the Zacks sub-industry increased 35.7%, the sector gained 28.3%.

The S&P 500 Index has declined 5.2% YTD and increased 11.5% in the past year.

The stock is currently trading at 32.78X forward 12-month earnings, which compares to 31.48X for the Zacks sub-industry, 25.63X for the Zacks sector and 23.05X for the S&P 500 index.

Over the past five years, the stock has traded as high as 57.2X and as low as 23.63X, with a 5-year median of 34.2X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our $209 price target reflects 34.42X forward 12-month earnings.

The table below shows summary valuation data for SNPS

Valuation Multiples - SNPS		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	32.78	31.48	25.63	23.05
	5-Year High	57.2	31.48	25.63	23.05
	5-Year Low	23.63	18.62	16.72	15.23
	5-Year Median	34.2	24.99	19.28	17.49
P/S F12M	Current	5.89	7.02	3.71	3.44
	5-Year High	6.7	7.23	3.71	3.44
	5-Year Low	2.55	3.88	2.32	2.53
	5-Year Median	4.1	5.42	3.11	3.01
EV/Sales TTM	Current	6.54	7.3	3.76	2.83
	5-Year High	7.33	8.11	4.44	3.48
	5-Year Low	2.39	3.19	2.57	2.16
	5-Year Median	4.06	5.45	3.55	2.83

As of 07/06/2020

Industry Analysis Zacks Industry Rank: Bottom 40% (150 out of 251)

Top Peers

Company (Ticker)	Rec	Rank
Autodesk, Inc. **(ADSK)**	Neutral	3
ANSYS, Inc. **(ANSS)**	Neutral	3
Cadence Design Systems, Inc. **(CDNS)**	Neutral	3
Citrix Systems, Inc. **(CTXS)**	Neutral	3
Dassault Systemes SA **(DASTY)**	Neutral	3
International Business Machines Corporation **(IBM)**	Neutral	3
Microsoft Corporation **(MSFT)**	Neutral	3
Keysight Technologies Inc. **(KEYS)**	Underperform	5

Industry Comparison Industry: Computer - Software   Industry Peers

	SNPS	X Industry	S&P 500	ANSS	CDNS	IBM
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	3	3
VGM Score	B	-	-	F	C	B
Market Cap	30.02 B	1.76 B	22.04 B	25.82 B	27.66 B	106.72 B
# of Analysts	6	4	14	6	6	6
Dividend Yield	0.00%	0.00%	1.89%	0.00%	0.00%	5.42%
Value Score	C	-	-	F	D	A
Cash/Price	0.03	0.09	0.07	0.03	0.03	0.11
EV/EBITDA	36.71	18.93	12.81	42.36	43.54	8.39
PEG Ratio	3.48	2.90	2.94	NA	3.22	3.12
Price/Book (P/B)	7.01	5.69	3.01	7.87	12.82	5.30
Price/Cash Flow (P/CF)	37.61	24.10	11.87	45.99	24.83	6.08
P/E (F1)	38.23	31.77	21.54	50.47	40.14	10.65
Price/Sales (P/S)	8.83	4.41	2.35	17.17	11.64	1.39
Earnings Yield	2.64%	2.93%	4.39%	1.98%	2.49%	9.39%
Debt/Equity	0.13	0.15	0.76	0.16	0.16	2.62
Cash Flow ($/share)	5.30	1.18	6.94	6.56	3.98	19.75
Growth Score	B	-	-	D	B	C
Hist. EPS Growth (3-5 yrs)	18.01%	9.26%	10.90%	14.49%	27.77%	-3.16%
Proj. EPS Growth (F1/F0)	15.61%	0.87%	-9.51%	-9.17%	11.82%	-11.89%
Curr. Cash Flow Growth	24.16%	7.45%	5.51%	8.84%	138.95%	2.09%
Hist. Cash Flow Growth (3-5 yrs)	8.09%	8.71%	8.55%	7.79%	24.55%	-3.76%
Current Ratio	0.95	1.54	1.30	2.40	1.38	0.96
Debt/Capital	11.87%	22.84%	44.46%	13.88%	13.82%	72.36%
Net Margin	13.96%	6.34%	10.62%	27.34%	41.74%	11.78%
Return on Equity	11.53%	11.74%	15.75%	13.73%	55.35%	57.55%
Sales/Assets	0.50	0.63	0.55	0.37	0.77	0.50
Proj. Sales Growth (F1/F0)	7.93%	3.74%	-2.57%	4.28%	9.40%	-5.40%
Momentum Score	C	-	-	C	C	B
Daily Price Chg	0.92%	0.00%	1.12%	1.23%	0.94%	0.41%
1 Week Price Chg	3.76%	1.98%	3.66%	5.26%	4.24%	2.14%
4 Week Price Chg	6.73%	0.00%	-7.12%	3.75%	7.17%	-11.46%
12 Week Price Chg	42.29%	21.50%	11.84%	24.17%	38.00%	-0.79%
52 Week Price Chg	47.04%	13.69%	-6.03%	45.07%	32.77%	-14.50%
20 Day Average Volume	935,265	163,749	2,400,079	519,418	1,999,263	5,427,053
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 12 week change	-1.06%	-10.85%	-8.26%	-5.26%	6.62%	-10.60%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	C
Growth Score	B
Momentum Score	C
VGM Score	B

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures