

PTC Inc. (PTC)	Long Term: 6-12 Months	Zacks Recommendation:	Outperform
\$76.03 (As of 02/27/20)	(Since: 01/28/20) Prior Recommendation: N		
Price Target (6-12 Months): \$88.00	Short Term: 1-3 Months	Zacks Rank: (1-5) Zacks Style Scores: Value: F Growth: F	1-Strong Buy VGM:F Momentum: B

Summary

PTC is benefiting from improvement in AR and IoT bookings. Synergies from Onshape acquisition remain a growth driver. Particularly, robust adoption of the latest Vuforia Expert Capture solution holds promise. New deal wins on the back of strategic alliances with Rockwell Automation and Microsoft bode well. Additionally, growing clout of ThingWorx and Windchill platforms remain noteworthy. Solid demand for precision in design, complex prototyping and digitalization of construction remains a key catalyst. This is expected to aid the demand for 3D-CAD offerings in the automotive, aerospace, manufacturing, healthcare and defense verticals, which is a positive for PTC. Further, the company's increasing investments on emerging trends like IoT, AR/VR and autonomous vehicle sub-systems presents significant prospects.

Data Overview

52 Week High-Low	\$102.47 - \$62.05
20 Day Average Volume (sh)	561,849
Market Cap	\$8.8 B
YTD Price Change	1.5%
Beta	1.09
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Computer - Software
Zacks Industry Rank	Top 21% (53 out of 254)

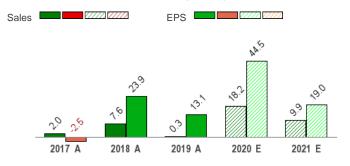
Last EPS Surprise	26.7%
Last Sales Surprise	3.0%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	04/22/2020
Earnings ESP	4.7%
P/E TTM	39.0
P/E F1	32.1

P/E F1	32.1
PEG F1	NA
P/S TTM	6.6

Price, Consensus & Surprise



Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	405 E	399 E	411 E	453 E	1,631 E
2020	356 A	353 E	366 E	406 E	1,484 E
2019	335 A	316 A	323 A	335 A	1,256 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$0.71 E	\$0.66 E	\$0.69 E	\$0.91 E	\$2.82 E
2020	\$0.57 A	\$0.50 E	\$0.52 E	\$0.79 E	\$2.37 E
2019	\$0.56 A	\$0.38 A	\$0.36 A	\$0.64 A	\$1.64 A
*Quarterly	figures may no	t add up to anni	ual.		

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 02/27/2020. The reports text is as of 02/28/2020.

Overview

Boston, MA-based PTC Inc. provides software solutions and services globally, that aid manufacturing companies to design, operate, and manage products. Founded in 1985, the company was formerly known as Parametric Technology Corporation and changed its name to PTC Inc. in January 2013.

The company offers comprehensive portfolio of software solutions comprising computer-aided design (CAD) modeling, product lifecycle management (PLM), data orchestration (IIoT), and experience creation (AR) products.

Creo is the company's flagship 3D CAD product. Creo offers design engineers with design flexibility, assembly design, surfacing, and virtual prototyping design capabilities.

PTC's primary PLM product, Windchill software offers a unified repository for comprehensive product information. Windchill also includes AR capabilities, to aid customers develop a digital product definition and publish the illustration of the product in AR.

Meanwhile, ThingWorx product helps customers to develop and deploy IoT applications; manage connected devices; and analyze complex industrial IoT data, in a cost- and time-efficient manner.

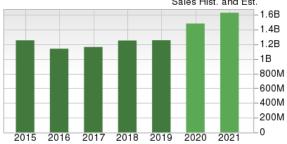
Vuforia Studio product aids industrial enterprises to publish AR experiences superimpose vital digital information from CAD, IoT, and other related sources onto the view of the material things on which users

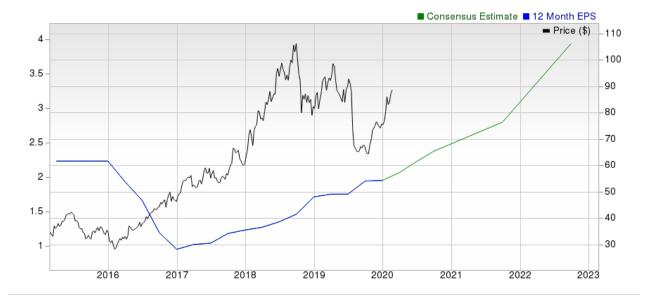
In fiscal 2019, revenues came in at \$1.311 billion as per ASC 605. Under ASC 606, the company reported revenues of \$1.256 billion.

PTC has two operating and reportable segments: Software Products (44.6% of fiscal 2019 revenues), which includes subscription, license and associated support revenues; and Professional Services (55.4%), which includes implementation, consulting and training services.

Per ASC 606, the company generated 43% of revenues from Americas, while the balance 57% came from foreign operations in fiscal 2019.







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Reasons To Buy:

- ▲ PTC is well poised to gain from strength in product portfolio. The company's solutions aid industrial enterprises to enhance operational efficiency, accelerate product and service innovation, and boost workforce productivity. Growing clout of the company's major technology platforms including, 3D modeling (CAD) offering; Creo, lifecycle management (PLM) solution; Windchill, data orchestration (IIoT) offering; ThingWorx, and experience creation (AR) product; Vuforia Studio, is expected to drive the top-line.
- ▲ Global 3D CAD software market is set to hit \$14.5 billion by 2026, at a CAGR of 5.9% between 2019 and 2026, per Acumen Research and Consulting data. Increased adoption of computer-based design in the automotive sector, and growing clout of additive production by manufacturers, are tailwinds. Solid demand for precision in design, complex prototyping and

Robust adoption driven by high demand for SaaS-based CAD, PLM and IIoT solutions, new business bookings on the back of strategic alliances with Rockwell Automationand Microsoft, are key catalysts.

digitalization of construction is expected to drive demand for 3D-CAD offerings in the automotive, aerospace, manufacturing, healthcare and defense verticals.

- Moreover, increasing spending by enterprises on emerging categories like IoT and AR/VR presents significant prospects for PTC. Market research firm IDC estimates global IoT spending to hit \$1.1 trillion in 2023. Moreover, the firm estimates AR/VR spending to accelerate at a CAGR of 77% over 2019-2023 timeframe. This presents significant growth opportunity for semiconductor chip makers and electronics sensor developers. We believe that the company's expanding product portfolio will help it to win frequent orders and new customers from these emerging markets. Notably, IDC's "MarketScape: Worldwide Industrial IoT Platforms in Manufacturing 2019 Vendor Assessment" report places PTC in the "Leaders" quadrant, which reflects the company's growing clout in the IIoT vertical on robust adoption of its ThingWorx offering.
- ▲ The company's collaborations with advanced technology suppliers, hardware vendors, specialized application developers, and CAD and PLM providers is a key catalyst. For instance, PTC's partnership with ANSYS enables integration of Creo with ANSYS' Discovery Live real-time simulation capabilities. The company also teamed up with Rockwell Automation, which is expected to enhance PTC's Vuforia and ThingWorx platforms. It has also partnered with Microsoft to deploy the ThingWorx Industrial Innovation Platform on Azure cloud platform. We believe that the strong partner network will help the company win customers more frequently, which in turn will drive the top line.
- ▲ Strategic acquisition strategy has played a pivotal part in developing the company's business in the last few years. Recently, the company acquired Onshape for \$470 million in cash to enhance Creo and Windchill products with advanced SaaS capabilities. The company's buyout of TWNKLS will strengthen its industrial AR offerings. These along with Frustum (advanced patented desktop and cloud-based generative design software provider), Waypoint Labs and Reality Editor (adding more IoT and AR product development capabilities) acquisitions have enabled the company to offer new and innovative products. We anticipate PTC to pursue tuck-in acquisitions, which will further expand product portfolio in the long term.
- ▲ We also note that it has a diversified customer base, which is evident from the fact that no single customer accounted for more than 5% of revenues in the last three years. Markedly, at the end of fiscal 2019, total deferred revenues (including unbilled deferred revenues and backlog) came in at \$1.135 billion. We also believe that PTC's increasing investments on emerging trends like IoT, AR/VR and autonomous vehicle sub-systems presents significant prospects for the company in the long haul.

Risks

- PTC generated a significant portion (57%) of revenues from the International market in fiscal 2019. Adverse foreign currency exchange
 rates, particularly the Euro, impacted European revenues unfavorably in 2019 by \$26 million. Unfavorable changes in foreign currency
 exchange rates impacted Asia Pacific revenues by \$6 million in 2019. This is anticipated to weigh on revenue growth in the near term
 owing to the strengthening of the U.S. dollar compared with the Euro and other foreign currencies, which is a significant concern.
- Moreover, Europe continues to remain a major headwind for PTC. Uncertainty related to Brexit, growing data privacy regulations and
 overall macro-weakness in the region is anticipated to hurt top line in the near term. Notably, the company generated 37% of fiscal 2019
 revenues (per ASC 606) from Europe.
- Further, PTC has been incurring operating losses since inception and has an accumulated deficit of \$191.4 million at the end of fiscal 2019. Continuing investments on research & development and sales & marketing, are likely to weigh on profitability. Despite the improving top line, mounting losses doesn't augur well for investor confidence in our view.
- PTC faces stiff competition in the computer-aided design (CAD) market from Cadence Design Systems (as it recently ventured into the market with 3D Solver offering), Autodesk, ANSYS and Synopsys, to mention a few. Considering IIoT vertical, similar solutions from large established companies like Amazon, IBM, Oracle, SAP, Siemens AG, and GE are likely to affect adoption of PTC's ThingWorx IoT platform. New entrants are likely to pose a threat to the company's market share. This might compel the company resort to competitive pricing to maintain and capture further market share.
- Frequent acquisitions have escalated integration risks for PTC. Moreover, we also note that the frequent acquisitions negatively impact the company's balance sheet in the form of high level of goodwill and intangible assets, which accounted for approximately \$1.87 billion or 57.1% of total assets as of Dec 28, 2019.
- Moreover, the company is trading at premium in terms of Price/Earnings (P/E). PTC currently has a trailing 12-month P/E ratio of 55.5X. This level compares unfavorably with what the industry witnessed in the last year. Consequently, the valuation looks slightly stretched from P/E perspective.

Last Earnings Report

PTC's Earnings and Revenues Breeze Past Estimates in Q1

PTC reported first-quarter fiscal 2020 non-GAAP earnings of 57 cents per share, up 1.8% on a year-over-year basis, beating the Zacks Consensus Estimate by 26.7%.

Revenues came in at \$356.1 million, up 6.4% year over year, surpassing the Zacks Consensus Estimate of \$346 million. Solid AR and IoT bookings and synergies from Onshape acquisition drove growth.

Quarter Ending	12/2019
Report Date	Jan 22, 2020
Sales Surprise	2.95%
EPS Surprise	26.67%
Quarterly EPS	0.57
Annual EPS (TTM)	1.95

Top-Line in Detail

Recurring revenues of \$305.4 million improved 21.4% year over year. Perpetual license of almost \$9 million declined 78.5% from the year-ago quarter's figure, owing to "end of perpetual license sales on Jan 1, 2019."

Revenues by License, Support and Services

License revenues (34.7% of total revenues) were \$123.4 million, up 17.2% over the year-ago quarter's figure.

Support and cloud services revenues (53.6%) of \$190.9 million, improved 1.6% year over year.

Professional services revenues (11.7%) of \$41.7 million, increasing 0.7% year over year.

Revenues by Product Group

Revenues from Core Product Group, which includes computer-aided design (CAD) & Product Lifecycle Management (PLM) offerings, came in at \$830 million, up 9% (up 10% at cc).

Revenues from Growth Product Group (which includes IoT, AR & Onshape) came in at \$48 million, up 36% year over year (37% on a cc basis).

Revenues from Focused Solutions Group (FSG) came in at \$45 million, down 6% year over year (5% on a cc basis).

ARR Performance

Annualized recurring revenues (ARR) were \$1.16 billion, up 11% year over year, driven by strength in Core and Growth product groups.

ARR from Core Product Group (CAD & PLM) came in at \$830 million, up 9% (up 10% at cc). Growth was driven by strength in PLM ad robust performance across China and Europe.

ARR from Growth Product Group (IoT, AR & Onshape) came in at \$151 million, up 35% year over year, (36% on a cc basis). Year-over-year growth can be attributed to improvement in AR and IoT bookings and strength across Europe and APAC. Synergies from Onshape acquisition

ARR from Focused Solutions Group (FSG) came in at \$178 million, up 1% year over year on a cc basis.

Operating Details

Non-GAAP gross margin contracted 160 basis points (bps) on a year-over-year basis to 78.2%.

Non-GAAP operating expenses came in at \$185 million. GAAP operating expenses increased 4.8% year over year to \$238.3 million. This can be attributed to higher research & development expenses, and general & administrative expenses, which increased 7.4% and 17.7%, respectively. Moreover, Sales & marketing expenses surged 3.2% from the year-ago quarter.

Operating income on a non-GAAP basis increased 2.1% year over year to \$93.1 million.

Operating margin on a non-GAAP basis contracted 110 bps to 26.1%.

Balance Sheet & Cash Flow

As of Dec 28, 2019, cash, cash equivalents and marketable securities were \$294.5 million, compared with prior quarter's figure of \$327 million.

Total debt, net of deferred issuance costs, was \$1.124 billion, up from prior quarter's \$669.1 million.

Cash provided by operating activities came in at \$7.5 million, compared with prior-quarter figure of \$55.2 million.

Guidance

Management anticipates the first-quarter momentum to continue, and thereby raised fiscal 2020 revenue guidance.

Fiscal 2020 revenues are now projected between \$1.445 billion and \$1.525 billion, compared with the earlier guided range of \$1.41-\$1.51 billion.

Further, non-GAAP earnings are now expected between \$2.15 and \$2.65 per share, compared with the prior range of \$1.95-\$2.60 per share.

ARR is expected to be \$1.270-\$1.295 billion, up 14-16% year over year.

Adjusted free cash flow is projected to be \$260-\$280 million. Non-GAAP operating margin is expected to be 26-29%.	

Recent News

On Jan 29, 2020, PTC announced senior notes offering of \$750 million in aggregate principal amount slated to mature in 2025 and 2028.

On Jan 28, 2020, PTC declared it has been recognized as a leader by Forrester Research, in the latest report titled, "The Forrester Wave: Industrial IoT Software Platforms, Q4 2019."

On Jan 16, 2020, PTC announced the appointment of Kathleen Mitford as the company's chief strategy officer.

On Dec 10, 2019, PTC entered into a partnership with Magic Leap to aid industrial and enterprise customers to integrate the AR capabilities of its Vuforia Engine solution with Magic Leap 1 wearable headset.

Valuation

PTC shares are up 15.8% in the past six-month period, but down 18% over the trailing 12-month period. Stocks in the Zacks sub-industry and Zacks Computer & Technology sector are up 16.4% and 13.4%, respectively in the past six-month period. Over the past year, the Zacks sub-industry and sector are up 32.5% and 19.2%, respectively.

The S&P 500 index is up 8% in the past six-month period and 13.4% in the past year.

The stock is currently trading at 6.89X forward 12-month sales, which compares to 8.05X for the Zacks sub-industry, 3.87X for the Zacks sector and 3.46X for the S&P 500 index.

Over the past five years, the stock has traded as high as 10.2X and as low as 2.59X, with a 5-year median of 5.78X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$88 price target reflects 7.97X forward 12-month sales.

The table below shows summary valuation data for PTC

Valuation Multiples - PTC						
		Stock S	ub-Industr	y Sector	S&P 50	
	Current	6.89	8.05	3.87	3.46	
P/S F12M	5-Year High	10.2	8.84	4.24	3.77	
	5-Year Low	2.59	3.86	2.56	2.51	
	5-Year Median	5.78	5.91	3.5	3.17	
	Current	7.04	9.2	5.29	4.51	
P/B TTM	5-Year High	15	10.1	5.79	4.9	
	5-Year Low	3.8	3.99	3.13	2.85	
	5-Year Median	7.33	6.32	4.25	3.62	
	Current	7.7	7.27	4	3.04	
EV/Sales TTM	5-Year High	10.5	8.01	4.2	3.33	
	5-Year Low	2.95	3.19	2.56	2.16	
	5-Year Median	6.16	5.33	3.48	2.82	

As of 02/27/2020

Industry Analysis Zacks Industry Rank: Top 21% (53 out of 254)

■ Industry Price Industry ■ Price -110 140 -100 130 -90 120 -80 70 110 60 100 -50 90 -40 80 --30 70 2016 2017 2018 2019 2020

Top Peers

Cadence Design Systems, Inc. (CDNS)	Outperform
Nuance Communications, Inc. (NUAN)	Outperform
Autodesk, Inc. (ADSK)	Neutral
ANSYS, Inc. (ANSS)	Neutral
Blackbaud, Inc. (BLKB)	Neutral
CommVault Systems, Inc. (CVLT)	Neutral
Pegasystems Inc. (PEGA)	Neutral
Verint Systems Inc. (VRNT)	Neutral

Industry Comparison Industry: Computer - Software			Industry Peers			
	PTC Outperform	X Industry	S&P 500	ANSS Neutral	CDNS Outperform	VRNT Neutra
VGM Score	E	-	-	D	С	В
Market Cap	8.78 B	1.69 B	21.35 B	20.55 B	18.45 B	3.56 E
# of Analysts	7	4	13	7	6	4
Dividend Yield	0.00%	0.00%	2.02%	0.00%	0.00%	0.00%
Value Score	F	-	-	F	D	В
Cash/Price	0.03	0.10	0.04	0.03	0.03	0.11
EV/EBITDA	69.64	19.13	12.70	37.06	29.10	18.46
PEG Ratio	NA	2.12	1.84	NA	2.73	0.95
Price/Book (P/B)	7.04	4.92	2.92	5.95	8.79	2.67
Price/Cash Flow (P/CF)	47.10	22.43	11.89	42.09	16.60	13.67
P/E (F1)	32.08	28.09	16.90	36.29	26.78	13.31
Price/Sales (P/S)	6.61	4.29	2.39	13.56	7.90	2.75
Earnings Yield	3.12%	3.37%	5.90%	2.76%	3.74%	7.51%
Debt/Equity	1.05	0.16	0.70	0.12	0.16	0.66
Cash Flow (\$/share)	1.61	1.13	6.94	5.80	3.97	3.89
Growth Score	F	-	-	D	Α	С
Hist. EPS Growth (3-5 yrs)	-9.02%	10.09%	10.85%	12.93%	21.57%	2.37%
Proj. EPS Growth (F1/F0)	44.77%	13.10%	6.79%	2.26%	11.74%	9.59%
Curr. Cash Flow Growth	-3.70%	7.45%	5.92%	-3.74%	138.95%	11.19%
Hist. Cash Flow Growth (3-5 yrs)	-9.76%	7.96%	8.38%	6.57%	24.55%	7.84%
Current Ratio	1.17	1.50	1.23	3.72	1.74	1.57
Debt/Capital	51.32%	18.56%	42.53%	10.92%	14.13%	39.72%
Net Margin	3.38%	6.55%	11.57%	29.77%	42.33%	3.95%
Return on Equity	13.10%	11.82%	16.80%	15.76%	62.01%	13.50%
Sales/Assets	0.47	0.64	0.54	0.40	0.84	0.44
Proj. Sales Growth (F1/F0)	13.40%	7.19%	4.07%	9.59%	9.70%	7.98%
Momentum Score	В	-	-	Α	D	C
Daily Price Chg	-5.47%	-2.49%	-3.99%	-9.64%	-4.41%	-4.43%
1 Week Price Chg	1.45%	-0.70%	-0.94%	-1.67%	-5.12%	0.07%
4 Week Price Chg	-10.33%	-8.29%	-9.83%	-12.85%	-10.01%	-9.46%
12 Week Price Chg	0.36%	0.00%	-6.79%	-3.49%	0.05%	4.19%
52 Week Price Chg	-18.09%	7.41%	2.79%	37.74%	15.00%	-0.04%
20 Day Average Volume	561,849	77,613	2,169,477	604,977	1,803,398	283,495
(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%	-0.09%	0.00%	-3.43%	0.00%
(F1) EPS Est 12 week change	17.76%	0.00%	-0.24%	0.00%	-3.43%	-1.85%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	-0.72%	0.00%	-17.50%	0.00%

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.



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.

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