Momentum: F



Texas Instruments (TXN) \$141.02 (As of 08/24/20) Price Target (6-12 Months): \$162.00 Long Term: 6-12 Months | Zacks Recommendation: Outperform (Since: 07/23/20) Prior Recommendation: Neutral Short Term: 1-3 Months | Zacks Rank: (1-5) Zacks Style Scores: VGM:F

Summary

Texas Instruments optimistic about the growth in the personal electronics market owing to coronavirus-led increasing work-from-home trend. Further, growth in industrial market on the back of strong momentum across medical space remained positive. The company's short lead times and high availability of products for immediate shipment during the ongoing pandemic are tailwinds. Further, it remains confident on its long-lived products portfolio and efficient manufacturing strategies. Also, continuous returns to shareholders are likely to help the stock to gain investors' confidence. However, sluggish automotive market due to coronavirus pandemic is a concern. The stock has underperformed its industry on a year-to-date basis. The U.S.-China trade war, high debt level and rising competitive pressure in the auto chip space are major headwinds.

Data Overview

52 Week High-Low	\$141.81 - \$93.09
20 Day Average Volume (sh)	3,816,857
Market Cap	\$129.2 B
YTD Price Change	9.9%
Beta	1.11
Dividend / Div Yld	\$3.60 / 2.6%
Industry	Semiconductor - General
Zacks Industry Rank	Top 21% (52 out of 252)

Last EPS Surprise	68.2%
Last Sales Surprise	9.3%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	10/27/2020
Earnings ESP	0.0%

P/E TTM	26.5
P/E F1	27.9
PEG F1	2.8
P/S TTM	9.4

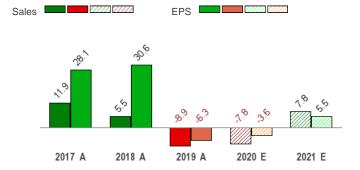
Price, Consensus & Surprise



Value: F

Growth: C

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	3,289 E	3,517 E	3,801 E	3,595 E	14,296 E
2020	3,329 A	3,239 A	3,413 E	3,277 E	13,261 E
2019	3,594 A	3,668 A	3,771 A	3,350 A	14,383 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.14 E	\$1.29 E	\$1.48 E	\$1.37 E	\$5.33 E
2020	\$1.24 A	\$1.48 A	\$1.25 E	\$1.15 E	\$5.05 E
2019	\$1.22 A	\$1.29 A	\$1.49 A	\$1.12 A	\$5.24 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 08/24/2020. The reports text is as of 08/25/2020.

Overview

Headquartered in Dallas, Texas, Texas Instruments, Inc. is an original equipment manufacturer of analog, mixed signal and digital signal processing (DSP) integrated circuits.

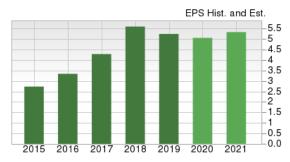
TI has manufacturing and design facilities, including wafer fabrication and assembly/test operations in North America, Asia and Europe.

Management's strategy has been to build assets that would be fully utilized through their lifetimes and outsource any excess demand in peak situations to outside foundries.

The company's Analog segment generated 71% of revenue in 2019 (up from 68% in 2018). Analog products have been categorized into three—high performance analog, high volume analog and logic, and power management.

The Embedded Processing segment generated 20.5% of revenue (down from 22% in 2018). This segment includes TI's OMAP, connectivity solutions, non-wireless DSPs and microprocessors.

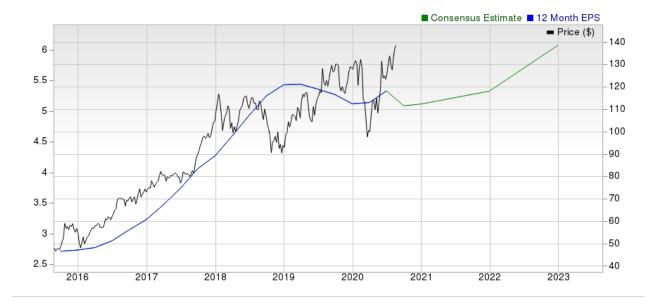
The Other segment generated the remaining 8.5%. The segment includes smaller semiconductor product lines, such as DLP products, RISC microprocessors and ASICs, calculators and other schoolroom tools, and royalties.





Products are sold in industrial, personal electronics, automotive, communications, enterprise and other markets, which accounted for 36%, 23%, 21%, 11%, 6%, and 3%, respectively, of 2019 sales.

TI has manufacturing and design facilities, including wafer fabrication and assembly/test operations in North America, Asia and Europe.



Reasons To Buy:

Demand remains strong, particularly in high-margin auto and industrial verticals, analog and embedded processing products, and 300mm manufacturing strategy strengthening margins.

- ▲ TI is one of the largest suppliers of analog and digital signal processing integrated circuits. The company's compelling product line-up, efficient manufacturing strategies and low-cost 300mm capacity are anticipated to drive long-term earnings. Further, its focus on innovation of the product portfolio across both the Analog and Embedded Processing segments remain major positive.
- ▲ The company is seeing particular success in certain fast-growing segments of the **automotive market**. Texas Instruments focuses on infotainment, safety and ADAS, body electronics (including lighting), hybrid electric vehicle and powertrain segments of the automotive market. The company has made significant progress on the ADAS side, shipping millions of chips into this market. The strength is expected to continue as the electronic content in cars continues to increase at a nice pace.
- ▲ Texas Instruments is focused on the Internet of Things (IoT). Much of the recent growth in the embedded business comes from microcontrollers, which are some of the enabling products. The scope of IoT is tremendous for semiconductor companies, since it connects every conceivable electronic device. Further, the compny's partner program based on its IoT Cloud ecosystem remains encouraging. Notably, the IoT ecosystem is backed by Texas Instrument's partnership with companies like 2lemetry, ARM, Arrayent, Exosite, IBM, LogMeIn, Spark, and Thingsquare which helps it to provide software, hardware or cloud-based services to power platforms based on TI technology.

Risks

- Texas Instruments operates in an **intensely competitive industry**. First, there are many competitors of all sizes, such as Broadcom, NXP, Analog Devices and Intel. Second, the fragmented nature of the industry allows firms to find niches where they can concentrate their efforts. Third, the pace of technological change is rapid; therefore, product life cycles in some target markets are shorter than in most industries. So as one of the largest semiconductor firms in the world, TI faces the challenge of maintaining enough flexibility to respond swiftly to new market opportunities and at the same time protecting the existing customer base. TI is reducing focus on some of the very short life cycle products, which we think is the correct strategy.
- Texas Instruments also has a leveraged balance sheet. As of Jun 30, 2020, the company's net debt was \$1.84 billion compared with \$1.81 billion as of Mar 31, 2020. Accumulating high debt levels might restrict sufficient cash flow generation which is needed to meet future debt obligations. Moreover, this may keep the company away from accessing the debt market and refinancing at suitable rates. Further, debt-to-capital ratio of the company was 47.1% as of Jun 30, 2020, which is up from 45.8% as of Mar 31, 2020. Additionally, it does have a relatively high goodwill (25.2% of total assets), which could increase further if the company makes some acquisitions. Since goodwill is not a real asset, it is something to keep an eye on, especially since TI maintains relatively low cash balances.
- Texas Instruments' business segments experience seasonality. They experience stronger demand in the second and third quarters and
 weaker demand in the first and fourth quarters. The seasonality causes considerable fluctuations in revenues and profits and makes
 forecasting difficult.
- Moreover, the company is trading at premium in terms of Price/Earnings (P/E). PayPal currently has a trailing 12-month P/E ratio of 25.11. This level compares unfavorably with what the industry witnessed in the last year. Additionally, the ratio is closer to the high end of the valuation range in this period. Consequently, the valuation looks slightly stretched from P/E perspective.

Last Earnings Report

Texas Instruments Beats on Q2 Earnings

Texas Instruments reported second-quarter 2020 earnings of \$1.48 per share, which surpassed the Zacks Consensus Estimate by 68.2%. The bottom line was also higher than management's guided range of 64 cents to \$1.04 per share. Further, the figure improved 8.8% year over year and 19.3% sequentially.

The company reported revenues of \$3.24 billion, which beat the Zacks Consensus Estimate by 9.3%. The top line also came within management's guided range of \$2.61-\$3.19 billion.

However, the figure decli	ined 12% from the year-ag	go quarter and 2.7% fro	om the prior quarter.

Sluggishness in the company's Analog and Embedded Processing segments, and softness in the automotive market owing to coronavirus-led disruptions impacted the top line negatively.

06/2020

9.34%

68.18%

1.48

5.33

Jul 21, 2020

Quarter Ending

Report Date

Sales Surprise

EPS Surprise

Quarterly EPS

Annual EPS (TTM)

Nevertheless, uptrend in personal electronics and industrial markets acted as a tailwind for the company during the quarter under review.

However, uncertainties related to ongoing pandemic remain a concern.

Nevertheless, the company's strong investments in new growth avenues, and research and development activities are positive.

Moreover, Texas Instruments is likely to address the rising unforecasted demand in the current scenario well on the back of short lead times and high availability of products for immediate shipment. Further, the company remains confident on its portfolio of long-lived products and efficient manufacturing strategies. Additionally, continuous returns to shareholders are likely to help the stock rebound in the near term.

End-Market in Detail

Texas Instrument's revenues were down 40% in the automotive market on year-over-year basis owing to ongoing coronavirus pandemic.

Further, revenues in the communications equipment space decreased 15% from the year-ago quarter.

Nevertheless, the company witnessed 10% growth in the personal electronics market compared with the year-ago quarter owing to coronavirus induced increasing work-from-home trend.

Further, it exhibited year-over-year growth of 2% in the industrial market during the reported quarter, thanks to strong medical space.

Segments in Detail

Analog: The company generated \$2.43 billion from this segment (75.1% of total revenues), which decreased 4% from the year-ago quarter. This can be attributed to weak performance of high-volume and power product lines during the reported quarter.

Embedded Processing: This segment generated \$546 million revenues (16.9% of total revenues), down 31% year over year. This was primarily owing to weak performance of processors and connected microcontrollers.

Other: Revenues in this segment were \$259 million (8% of total revenues). The figure was down 25% from the year-ago quarter.

Operating Details

Texas Instruments' gross margin of 64.2% contracted 10 basis points (bps) from the year-ago quarter.

Selling, general and administrative (SG&A) expenses expanded 100 bps year over year to \$401 million in the reported quarter. Further, research and development expenses expanded 110 bps from the year-ago quarter to \$379 million.

Operating margin was 37.9%, contracting 320 bps from the prior-year quarter.

Balance Sheet & Cash Flow

As of Jun 30, 2020, cash and short-term investments balance came in \$4.9 billion, which increased from \$4.7 billion as of Mar 31, 2020.

At the end of the reported quarter, the company had long-term debt of \$6.2 billion, up from \$5.5 billion in the prior quarter.

The company generated \$1.7 billion of cash from operations, up from \$851 million in the previous quarter.

Capex was \$130 million in the second quarter. Further, free cash flow stood at \$1.6 billion.

Additionally, Texas Instruments paid out dividends worth \$823 million during the reported quarter. Further, it repurchased shares worth \$882 million.

Guidance

For third-quarter 2020, Texas Instruments expects revenues between \$3.26 billion and \$3.54 billion.

Earnings are expected in the range of \$1.14 to \$1.34 per share.

Recent News

On **Jun 30, 2020,** TI unveiled buck-boost battery charger integrated circuits (ICs), namely BQ25790 and BQ25792. The new battery chargers offer maximum power density, reduced solution size, 97% efficiency and 10 times lower quiescent current through USB Type-C and USB Power Delivery.

On Apr 23, 2020, Texas Instrument's Board of Directors approved a quarter dividend of 90 cents per share for the shareholders of the record as of May 4, 2020, payable on May 18, 2020.

On **Mar 19, 2020**, Texas Instruments unveiled a 40-A SWIFTTM DC/DC buck converter namely TPS546D24A PMBus which enables engineers to reduce power loss by 1.5 W in high-performance data center and enterprise computing, medical, wireless infrastructure, and wired networking applications.

Valuation

Texas Instruments' shares are up 9.9% in the year-to-date period and 15.9% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 25.2% and the Zacks Computer & Technology sector is up 23.7% in the year-to-date period. Over the past year, the Zacks sub-industry and sector are up 60.8% and 40.9%, respectively.

The S&P 500 index is up 5.5% in the year-to-date period and 18.3% in the past year.

The stock is currently trading at 26.96X forward 12-month earnings, which compares to 21.64X for the Zacks sub-industry, 26.8X for the Zacks sector and 22.85X for the S&P 500 index.

Over the past five years, the stock has traded as high as 30.6X and as low as 15.44X, with a 5-year median of 20.61X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$162 price target reflects 29.81X forward 12-month earnings.

The table below shows summary valuation data for TXN

Valuation Multiples - TXN						
		Stock	Sub-Industry	Sector	S&P 500	
	Current	26.96	21.64	26.8	22.85	
P/E F 12M	5-Year High	30.6	21.64	26.8	22.85	
	5-Year Low	15.44	12.86	16.72	15.25	
	5-Year Median	20.61	16.37	19.6	17.58	
	Current	8.94	5.35	3.85	3.42	
P/S F12M	5-Year High	9.55	5.38	3.85	3.44	
	5-Year Low	3.41	2.4	2.32	2.54	
	5-Year Median	5.98	3.86	3.12	3.01	
	Current	17.79	11.31	12.47	11.3	
EV/EBITDA TTM	5-Year High	18.91	12.8	12.72	12.87	
	5-Year Low	8.73	5.38	7.55	8.27	
	5-Year Median	13.57	9.26	10.77	10.78	

As of 08/24/2020

Industry Analysis Zacks Industry Rank: Top 21% (52 out of 252)

■ Industry Price ■ Price 140 500 - Industry -130

Top Peers

O(Ti-l)	D	1 .
Company (Ticker)	Rec R	kank
Analog Devices, Inc. (ADI)	Outperform	2
Cirrus Logic, Inc. (CRUS)	Outperform	2
Maxim Integrated Products, Inc. (MXIM)	Outperform	2
Amtech Systems, Inc. (ASYS)	Neutral	3
NXP Semiconductors N.V. (NXPI)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	2
STMicroelectronics N.V. (STM)	Neutral	2
Infineon Technologies AG (IFNNY)	Underperform	2

Industry Comparison Industry: Semiconductor - General			Industry Peers			
	TXN	X Industry	S&P 500	CRUS	MXIM	NXP
Zacks Recommendation (Long Term)	Outperform	-	-	Outperform	Outperform	Neutra
Zacks Rank (Short Term)	1	-	-	2	2	3
VGM Score	E	-	-	E	G	D
Market Cap	129.17 B	15.52 B	23.81 B	3.48 B	18.43 B	34.56 E
# of Analysts	12	3	14	6	10	12
Dividend Yield	2.55%	0.40%	1.64%	0.00%	2.78%	1.21%
Value Score	F	-	-	D	D	C
Cash/Price	0.04	0.12	0.07	0.09	0.09	0.10
EV/EBITDA	18.78	6.59	13.37	13.13	22.64	16.81
PEG Ratio	2.76	3.07	3.02	2.35	2.78	2.57
Price/Book (P/B)	16.90	1.91	3.17	2.73	11.12	3.82
Price/Cash Flow (P/CF)	21.73	11.86	12.77	15.33	25.44	7.96
P/E (F1)	27.92	27.91	21.72	18.25	27.83	25.65
Price/Sales (P/S)	9.44	2.65	2.48	2.70	8.41	4.11
Earnings Yield	3.58%	3.22%	4.44%	5.48%	3.59%	3.89%
Debt/Equity	0.82	0.31	0.76	0.10	0.60	0.88
Cash Flow (\$/share)	6.49	4.89	6.93	3.88	2.72	15.55
Growth Score	С	-	-	D	D	D
Hist. EPS Growth (3-5 yrs)	18.71%	22.01%	10.41%	1.88%	10.54%	13.50%
Proj. EPS Growth (F1/F0)	-3.58%	-5.25%	-5.05%	-14.13%	9.87%	-46.39%
Curr. Cash Flow Growth	-4.66%	-14.35%	5.20%	10.42%	-8.10%	10.37%
Hist. Cash Flow Growth (3-5 yrs)	8.82%	12.14%	8.50%	3.55%	-0.43%	24.47%
Current Ratio	3.92	3.52	1.33	4.23	5.11	1.74
Debt/Capital	44.96%	23.47%	44.50%	9.25%	37.49%	46.92%
Net Margin	36.83%	10.14%	10.13%	13.47%	29.88%	-0.14%
Return on Equity	60.61%	13.98%	14.66%	16.75%	36.29%	19.47%
Sales/Assets	0.77	0.62	0.51	0.79	0.61	0.4
Proj. Sales Growth (F1/F0)	-7.80%	-1.98%	-1.45%	-7.59%	3.86%	-10.18%
Momentum Score	F	-	-	F	F	D
Daily Price Chg	0.49%	0.10%	1.32%	0.57%	0.86%	1.88%
1 Week Price Chg	2.17%	0.40%	-1.45%	-1.99%	-0.13%	-1.25%
4 Week Price Chg	6.74%	-0.43%	3.38%	-10.22%	0.28%	2.94%
12 Week Price Chg	19.65%	-0.48%	7.69%	-17.01%	19.43%	24.79%
52 Week Price Chg	15.90%	11.88%	3.85%	12.28%	31.49%	25.40%
20 Day Average Volume	3,816,857	1,266,241	1,873,293	816,477	3,596,574	2,054,833
(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%	1.00%	7.40%	1.60%	4.80%
(F1) EPS Est 12 week change	26.52%	0.79%	3.40%	7.40%	12.35%	5.94%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	-0.66%	2.96%	7.08%

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.

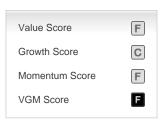
Zacks Rank

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.



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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