

## Texas Instruments (TXN)

**\$125.06** (As of 06/25/20)

Price Target (6-12 Months): **\$131.00**

Long Term: 6-12 Months

**Zacks Recommendation:**

**Neutral**

(Since: 12/23/19)

Prior Recommendation: Underperform

Short Term: 1-3 Months

**Zacks Rank:** (1-5)

**3-Hold**

Zacks Style Scores:

VGM:D

Value: D

Growth: C

Momentum: F

## Summary

Texas Instruments is gaining from rising data center demand. This is driving the enterprise systems revenues. Further, growing momentum in the industrial market is a tailwind. Strong investments in new growth avenues, and research and development are positives. The company remains confident on its portfolio of long-lived products and efficient manufacturing strategies. Also, continuous returns to shareholders are likely to instill investor optimism in the stock. Further, strong efforts toward innovation of Analog and Embedded Processing segments are positives. However, sluggish automotive market due to coronavirus induced factory shutdowns is a major concern. Also, the expected sluggish customer demand in the near term as a result of coronavirus-led recession is a woe. The stock has underperformed its industry on a year-to-date basis.

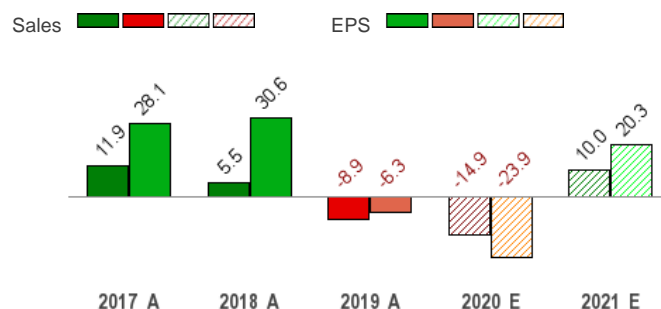
## Price, Consensus & Surprise



## Data Overview

52 Week High-Low	<b>\$135.70 - \$93.09</b>
20 Day Average Volume (sh)	<b>5,168,301</b>
Market Cap	<b>\$114.8 B</b>
YTD Price Change	<b>-2.5%</b>
Beta	<b>1.15</b>
Dividend / Div Yld	<b>\$3.60 / 2.9%</b>
Industry	<a href="#">Semiconductor - General</a>
Zacks Industry Rank	<b>Top 8% (19 out of 253)</b>

## Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	<b>22.8%</b>
Last Sales Surprise	<b>4.6%</b>
EPS F1 Est- 4 week change	<b>0.0%</b>
Expected Report Date	<b>07/28/2020</b>
Earnings ESP	<b>0.0%</b>
P/E TTM	<b>24.3</b>
P/E F1	<b>31.3</b>
PEG F1	<b>3.1</b>
P/S TTM	<b>8.1</b>

## Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	3,034 E	3,290 E	3,553 E	3,339 E	13,467 E
2020	3,329 A	2,929 E	2,927 E	3,033 E	12,239 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	\$0.96 E	\$1.13 E	\$1.32 E	\$1.21 E	\$4.80 E
2020	\$1.24 A	\$0.86 E	\$0.89 E	\$0.96 E	\$3.99 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 06/25/2020. The reports text is as of 06/26/2020.

## 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.

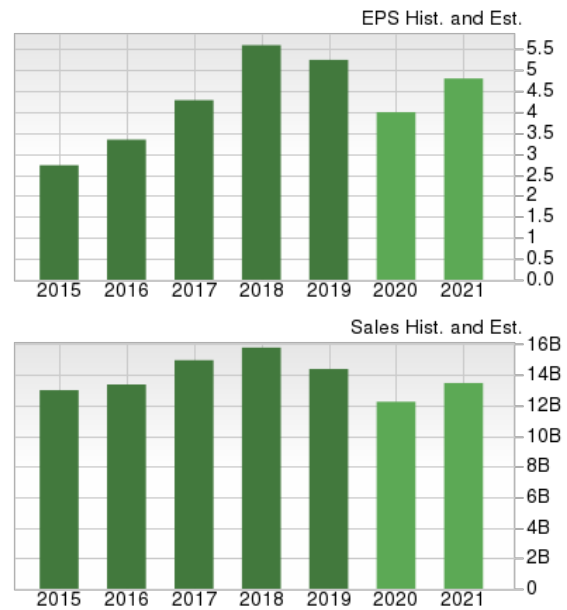
The company's Analog segment generated 71% of revenue in 2019 (up from 68% in 2018). Analog products have been categorized into three—high performance analog, high volume analog and logic, and power management.

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.



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## Reasons To Buy:

- ▲ TI serves **diverse end markets** that balance individual ups and downs in multiple ways. For instance, the seasonality in the personal electronics business is balanced out by the industrial, communications and automotive segments. The company serves individuals and corporations (personal communications, calculators), industrial customers (industrial, which includes a large number of customers across many markets and automotive manufacturers) and also infrastructure providers (communications segment). Further, the emergence of 5G technology is aiding the performance of the company's analog products in the communication equipment market. All these are making its revenue stream relatively steady despite the dynamism in each of the markets served. This is very important for a company like TI because it has huge facilities of its own that come along with high fixed costs.
- ▲ 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 company'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.

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

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## Reasons To Sell:

- ▼ 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 Mar 31, 2020, the company's net debt was \$1.8 billion compared with \$416 million as of Dec 31, 2019. 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 45.9% as of Mar 31, 2020, which is up from industry's average of 34.1%. 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 24.33. 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.

We remain concerned about risks associated with competition in the auto chip space. Also, sluggishness in the embedded processing unit, uncertain macro environment and high debt level remain concerns.

## Last Earnings Report

### Texas Instruments Beats on Q1 Earnings

Texas Instruments reported first-quarter 2020 earnings of \$1.24 per share, which surpassed the Zacks Consensus Estimate by 22.8%. The bottom line was also above management's guided range of 96 cents to \$1.14 per share.

Notably, the reported figure declined 1.6% year over year but surged 10.7% sequentially.

The company reported revenues of \$3.33 billion, which beat the Zacks Consensus Estimate by 4.6%. The top line also came within management's guided range of \$3.12-\$3.38 billion.

However, the figure declined 7% from the year-ago quarter and 0.6% from the previous quarter.

Sluggishness in the company's Analog and Embedded Processing segments, and end-market softness especially in the automotive space impacted the top line negatively.

Further, underperformance of the Chinese factories as a result of coronavirus outbreak remained a woe.

Nevertheless, the company witnessed strong demand in March, which continued till early April as a result of customers' apprehensions regarding procurement of supplies during the coronavirus-induced supply chain disruptions.

However, Texas Instruments expects sluggish customer demand in the near term as a result of COVID-19-induced recession.

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

Moreover, 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 mid-single digits in the automotive market on year-over-year basis due to sluggish demand as a result of factory shutdowns to curb the spread of the coronavirus.

Further, revenues in the communications equipment space decreased 50% from the year-ago quarter.

Although PC revenues improved low double digits year over year, mobile phones revenues fell low double digits, which can primarily be attributed to decline in revenues in the personal electronics market by mid-single digits.

Nevertheless, Texas Instrument's revenues were up mid-single digits year over year in the industrial market.

Further, it experienced solid data center demand that contributed significantly to its performance in the enterprise systems space where revenues surged double digits from the year-ago quarter.

### Segments in Detail

**Analog:** The company generated \$2.46 billion from this segment (73.9% of total revenues), which decreased 2% from the year-ago quarter. Although the company witnessed growth in power revenues, weak performance of high-volume and signal chain product lines led to year-over-year decline in the segment's top line.

**Embedded Processing:** This segment generated \$653 million revenues (19.6% of total revenues), down 18% year over year. This was primarily owing to weak performance of processors and connected microcontrollers.

**Other:** Revenues in this segment were \$216 million (6.5% of total revenues). The figure was down 23% from the year-ago quarter.

### Operating Details

Texas Instruments' gross margin of 62.7 contracted 20 basis points (bps) from the year-ago quarter.

Selling, general and administrative (SG&A) expenses expanded 100 bps year over year to \$417 million in the reported quarter. Further, research and development expenses expanded 50 bps from the year-ago quarter to \$377 million.

Operating margin was 37.4%, contracting 100 bps from the prior-year quarter.

### Balance Sheet and Cash Flow

As of Mar 31, 2020, cash and short-term investments balance came in \$4.7 billion, which decreased from \$5.4 billion as of Dec 31, 2019.

At the end of the reported quarter, the company had long-term debt of \$5.5 billion, up from \$5.3 billion in the prior quarter.

The company generated \$851 million of cash from operations, down from \$1.8 billion in the previous quarter.

Capex was \$161 million in the first quarter. Further, free cash flow stood at \$690 million.

Additionally, Texas Instruments paid out dividends worth \$841 million during the reported quarter. Further, it repurchased shares worth \$1.6

### Quarter Ending 03/2020

Report Date	Apr 21, 2020
Sales Surprise	4.59%
EPS Surprise	22.77%
Quarterly EPS	1.24
Annual EPS (TTM)	5.14

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billion.

#### **Guidance**

Texas Instruments has widened its guided range for both revenues and earnings for the current quarter owing to COVID-19-induced recession.

For second-quarter 2020, the company expects revenues between \$2.61 billion and \$3.19 billion.

Earnings are expected in the range of 64 cents to \$1.04 per share. The guidance includes an estimated \$10 million discrete tax benefit.

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## Recent News

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 SWIFT™ 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.

On **Jan 7, 2020**, Texas Instruments unveiled the new Jacinto 7 processor platform which offers innovative deep learning capabilities and advanced networking. This will help in solving design challenges in advanced driver assistance systems (ADAS) and automotive gateway applications.

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## Valuation

Texas Instruments' shares are down 2.5% in the year-to-date period but up 7.9% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 14.1% and 9.1% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 46.2% and 22.6%, respectively.

The S&P 500 index is down 5.2% in the year-to-date period but up 4.5% in the past year.

The stock is currently trading at 28.46X forward 12-month earnings, which compares to 20.54X for the Zacks sub-industry, 25.24X for the Zacks sector and 21.87X for the S&P 500 index.

Over the past five years, the stock has traded as high as 30.51X and as low as 15.44X, with a 5-year median of 20.42X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$131 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
P/E F12M	Current	28.46	20.54	25.24	21.87
	5-Year High	30.51	20.78	25.24	22.11
	5-Year Low	15.44	12.86	16.72	15.23
	5-Year Median	20.42	16.32	19.28	17.49
P/S F12M	Current	8.94	5.35	3.85	3.42
	5-Year High	9.55	5.38	3.85	3.44
	5-Year Low	3.41	2.4	2.32	2.53
	5-Year Median	5.98	3.86	3.12	3.02
EV/EBITDA TTM	Current	17.79	11.31	12.47	11.30
	5-Year High	18.91	12.8	12.72	12.85
	5-Year Low	8.73	5.38	7.57	8.25
	5-Year Median	13.57	9.26	10.77	10.83

As of 06/25/2020

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## Industry Analysis Zacks Industry Rank: Top 8% (19 out of 253)



## Top Peers

Company (Ticker)	Rec	Rank
Analog Devices, Inc. (ADI)	Neutral	3
Amtech Systems, Inc. (ASYS)	Neutral	2
Cirrus Logic, Inc. (CRUS)	Neutral	3
Infineon Technologies AG (IFNNY)	Neutral	3
Maxim Integrated Products, Inc. (MXIM)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	3
STMicroelectronics N.V. (STM)	Neutral	3
NXP Semiconductors N.V. (NXPI)	Underperform	4

Industry Comparison Industry: Semiconductor - General				Industry Peers		
	TXN	X Industry	S&P 500	CRUS	MXIM	NXPI
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Underperform
Zacks Rank (Short Term)	3	-	-	3	3	4
VGM Score	D	-	-	C	C	D
Market Cap	114.78 B	14.47 B	21.24 B	3.37 B	16.05 B	31.63 B
# of Analysts	12	7	14	6	10	11
Dividend Yield	2.88%	0.36%	1.97%	0.00%	3.19%	1.32%
Value Score	D	-	-	D	C	D
Cash/Price	0.04	0.10	0.07	0.09	0.10	0.03
EV/EBITDA	16.63	9.46	12.51	12.71	17.75	16.22
PEG Ratio	3.09	3.11	2.87	2.15	2.75	2.40
Price/Book (P/B)	14.84	3.24	2.90	2.75	9.91	3.42
Price/Cash Flow (P/CF)	19.27	12.42	11.34	14.85	20.89	7.29
P/E (F1)	31.34	34.45	20.76	18.28	27.53	24.03
Price/Sales (P/S)	8.13	2.52	2.18	2.63	7.29	3.59
Earnings Yield	3.19%	2.92%	4.55%	5.48%	3.64%	4.16%
Debt/Equity	0.71	0.39	0.77	0.11	0.61	0.80
Cash Flow (\$/share)	6.49	4.89	7.01	3.88	2.88	15.55
Growth Score	C	-	-	C	C	C
Hist. EPS Growth (3-5 yrs)	19.56%	40.62%	10.84%	1.44%	12.23%	14.19%
Proj. EPS Growth (F1/F0)	-23.79%	-15.97%	-10.73%	-16.89%	-10.04%	-47.58%
Curr. Cash Flow Growth	-4.66%	-12.00%	5.46%	10.42%	-14.31%	10.37%
Hist. Cash Flow Growth (3-5 yrs)	8.82%	12.14%	8.55%	3.55%	2.00%	24.47%
Current Ratio	3.49	3.27	1.29	4.10	5.95	1.77
Debt/Capital	41.56%	27.89%	45.14%	9.51%	38.02%	44.31%
Net Margin	35.17%	10.77%	10.53%	12.45%	37.00%	2.76%
Return on Equity	57.45%	21.93%	16.06%	16.46%	35.31%	24.18%
Sales/Assets	0.80	0.65	0.55	0.81	0.60	0.43
Proj. Sales Growth (F1/F0)	-14.91%	-3.34%	-2.70%	-8.77%	-6.83%	-12.85%
Momentum Score	F	-	-	A	B	C
Daily Price Chg	0.86%	0.41%	0.93%	1.30%	0.47%	0.27%
1 Week Price Chg	0.74%	0.61%	0.92%	-5.54%	5.77%	10.45%
4 Week Price Chg	7.93%	-1.79%	-1.04%	-19.52%	6.49%	14.22%
12 Week Price Chg	22.58%	24.62%	22.12%	-6.91%	26.03%	45.76%
52 Week Price Chg	7.94%	15.61%	-8.70%	33.23%	0.07%	14.25%
20 Day Average Volume	5,168,301	951,176	2,782,477	1,041,977	2,254,142	7,489,064
(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	-15.10%	-0.35%	-12.23%	-24.71%	0.18%	-45.87%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



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## 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.

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### 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	<b>D</b>
Growth Score	<b>C</b>
Momentum Score	<b>F</b>
VGM Score	<b>D</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.

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