

Texas Instruments (TXN)

\$132.21 (As of 02/17/20)

Price Target (6-12 Months): **\$139.00**

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:C

Value: D

Growth: B

Momentum: A

Summary

Texas Instruments remains optimistic about growing investments in automotive and industrial markets. These investments are expected to yield good returns for the company. Further, the company's deepening focus on innovation of product portfolio across Analog and Embedded Processing segments is a key catalyst. Its growing research and development (R&D) spending in both the segments is a major positive. We believe the company's efficient manufacturing strategies and optimized capital allocation in growth areas will continue to shape its growth trajectory. However, sluggishness across end-markets and weakening customer momentum are major headwinds. Further, the U.S.-China trade war, high debt level and rising competitive pressure in the auto chip space are headwinds. Notably, the stock has underperformed its industry over a year.

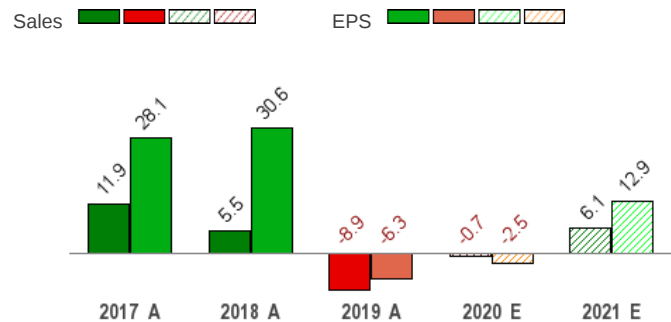
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$135.70 - \$101.57
20 Day Average Volume (sh)	5,073,054
Market Cap	\$123.6 B
YTD Price Change	3.1%
Beta	1.24
Dividend / Div Yld	\$3.60 / 2.7%
Industry	Semiconductor - General
Zacks Industry Rank	Top 18% (45 out of 255)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	9.8%
Last Sales Surprise	3.9%
EPS F1 Est- 4 week change	2.5%
Expected Report Date	NA
Earnings ESP	0.0%
P/E TTM	25.8
P/E F1	25.9
PEG F1	2.6
P/S TTM	8.6

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	3,488 E	3,702 E	3,986 E	3,722 E	15,157 E
2020	3,271 E	3,518 E	3,848 E	3,628 E	14,284 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	\$1.24 E	\$1.38 E	\$1.59 E	\$1.43 E	\$5.77 E
2020	\$1.06 E	\$1.23 E	\$1.47 E	\$1.35 E	\$5.11 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 02/17/2020. The reports text is as of 02/18/2020.

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.

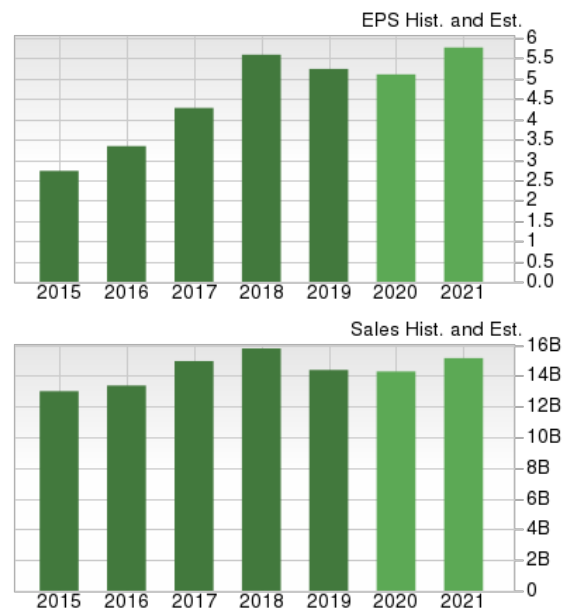
The company's Analog segment generated 71% of revenue in 2019 (up from 68% in 2018). Analog products have been categorized into three—high performance analog, high volume analog and logic, and power management.

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:

▲ 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.

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

▲ 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. Independent research firms Gartner and IDC are projecting steady growth in IoT-related spending through 2020. Success is however dependent on the ability to lower power consumption and cost, so the company is in the process of refreshing its product line. It has also launched a partner program that it is calling its IoT Cloud ecosystem, which is a partnership with companies like 2lemetry, ARM, Arrayent, Exosite, IBM, LogMeIn, Spark, and Thingsquare to provide software, hardware or cloud-based services to facilitate platforms based on TI technology.

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.

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.

▼ The balance sheet remains **highly leveraged**. At the end of 2019, the long term debt was \$5.3 billion. However, since the debt cap is just 29%, the risk is not really that high. It's just that the company holds more of its assets in the form of solid assets, patents and so forth. However, it does have a relatively high goodwill (24.2% 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.

Last Earnings Report

Texas Instruments Beats on Q4 Earnings

Texas Instruments reported fourth-quarter 2019 earnings of \$1.12 per share, which surpassed the Zacks Consensus Estimate by 9.8%. Further, the figure came within management's guided range of 91 cents to \$1.09 per share.

However, the reported figure declined 11.8% and 24.8% year over year and sequentially, respectively.

The company reported revenues of \$3.35 billion, which beat the Zacks Consensus Estimate by 3.9%. The top line also came above management's guided range of \$3.07-\$3.33 billion.

However, the figure declined 10% from the year-ago quarter and 11.2% from the previous quarter.

Persistent weakening in end-market conditions led to sluggishness in the company's Analog and Embedded Processing segments. This, in turn, hurt the top line.

Nevertheless, the company's focus on innovation of product portfolio across both the segments is evident from growing research and development (R&D) spending. This continues to be a key catalyst. Further, Texas Instruments continues to increase investments in the automotive and industrial markets, which are anticipated to bode well in the long run.

Moreover, the company remains confident on portfolio strength, efficient manufacturing strategies and optimized capital allocation in growth areas.

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 3% to 4% from the year-ago quarter in the industrial, automotive, enterprise systems and personal electronics markets.

Further, revenues were down 50% year over year in the communications equipment market during the reported quarter. Texas Instruments witnessed weak momentum across all its major customers and geographies.

Segments in Detail

Analog: The company generated \$2.497 billion from this segment (74.5% of total revenues), which decreased 5% from the year-ago quarter. This can be attributed to weak performance of high-volume, signal chain and power product lines.

Embedded Processing: This segment generated \$633 million revenues (18.9% of total revenues), down 20% year over year. This was primarily owing to weak performance of processors and connected microcontrollers.

Other: Revenues in this segment were \$220 million (6.6% of total revenues). The figure was down 24% from the year-ago quarter.

Operating Details

Texas Instruments' gross margin of 62.6% contracted 210 bps from the year-ago quarter.

Although selling, general and administrative (SG&A) expenses contracted 120 bps year over year to \$412 million in the reported quarter, research and development expenses expanded 70 bps from the year-ago quarter to \$414 million.

Operating margin was 37.3%, contracting 350 bps from the prior-year quarter.

Balance Sheet and Cash Flow

As of Dec 31, 2019, cash and short-term investments balance came in \$5.4 billion, which increased from \$5.1 billion as of Sep 30, 2019.

At the end of the reported quarter, the company had long-term debt of \$5.303 billion, up from \$5.302 billion in the prior quarter.

The company generated \$1.8 billion of cash from operations, down from \$1.9 billion in the previous quarter.

Capex was \$163 million in the fourth quarter. Further, free cash flow stood at \$1.6 billion.

Additionally, Texas Instruments paid out dividends worth \$841 million during the reported quarter. Further, it repurchased shares worth \$489 million.

Guidance

For first-quarter 2020, the company expects revenues between \$3.12 billion and \$3.38 billion.

Earnings are expected in the range of 96 cents to \$1.14 per share. The guidance includes an estimated \$20 million discrete tax benefit.

Quarter Ending 12/2019

Report Date	Jan 22, 2020
Sales Surprise	3.93%
EPS Surprise	9.80%
Quarterly EPS	1.12
Annual EPS (TTM)	5.12

Recent News

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.

Valuation

Texas Instruments' shares are up 6.1% in the past six-month period and 22.9% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 41.4% and 22.4% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and sector are up 43.2% and 29.4%, respectively.

The S&P 500 index is up 16.1% in the past six-month period and up 20.7% in the past year.

The stock is currently trading at 25.46X forward 12-month earnings, which compares to 19.66X for the Zacks sub-industry, 23.15X for the Zacks sector and 19.35X for the S&P 500 index.

Over the past five years, the stock has traded as high as 26.77X and as low as 15.44X, with a 5-year median of 20.16X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$139 price target reflects 26.78X 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 F 12M	Current	25.46	19.66	23.15	19.35
	5-Year High	26.77	19.73	23.15	19.35
	5-Year Low	15.44	12.86	16.87	15.18
	5-Year Median	20.16	16.26	19.32	17.47
P/S F12M	Current	8.58	5.38	3.79	3.58
	5-Year High	8.96	5.38	3.79	3.58
	5-Year Low	3.41	2.4	2.3	2.54
	5-Year Median	5.63	3.76	3.02	3
EV/EBITDA TTM	Current	18.62	12.65	13.02	12.31
	5-Year High	18.62	12.65	13.02	12.85
	5-Year Low	9.2	5.56	7.68	8.47
	5-Year Median	13.35	9.04	10.53	10.7

As of 02/14/2020

Industry Analysis Zacks Industry Rank: Top 18% (45 out of 255)



Top Peers

Cirrus Logic, Inc. (CRUS)	Outperform
Infineon Technologies AG (IFNNY)	Outperform
STMicroelectronics N.V. (STM)	Outperform
Analog Devices, Inc. (ADI)	Neutral
Amtech Systems, Inc. (ASYS)	Neutral
Maxim Integrated Products, Inc. (MXIM)	Neutral
NXP Semiconductors N.V. (NXPI)	Neutral
QUALCOMM Incorporated (QCOM)	Neutral

Industry Comparison Industry: Semiconductor - General				Industry Peers		
	TXN Neutral	X Industry	S&P 500	CRUS Outperform	MXIM Neutral	NXPI Neutral
VGM Score	C	-	-	B	C	B
Market Cap	123.59 B	16.50 B	24.61 B	4.78 B	17.12 B	38.32 B
# of Analysts	12	5.5	13	6	10	12
Dividend Yield	2.72%	0.96%	1.78%	0.00%	3.02%	1.09%
Value Score	D	-	-	D	C	B
Cash/Price	0.04	0.10	0.04	0.08	0.11	0.10
EV/EBITDA	15.95	10.40	14.06	26.12	18.88	9.66
PEG Ratio	2.53	2.56	2.09	1.37	2.34	1.31
Price/Book (P/B)	13.75	3.71	3.29	3.80	9.92	4.08
Price/Cash Flow (P/CF)	19.96	13.69	13.65	23.40	22.05	11.44
P/E (F1)	25.64	21.97	19.21	20.97	27.30	16.33
Price/Sales (P/S)	8.59	3.47	2.70	3.85	7.84	4.32
Earnings Yield	3.87%	4.28%	5.19%	4.77%	3.67%	6.13%
Debt/Equity	0.59	0.27	0.71	0.11	0.58	0.78
Cash Flow (\$/share)	6.62	5.28	6.92	3.49	2.88	11.98
Growth Score	B	-	-	A	C	C
Hist. EPS Growth (3-5 yrs)	20.28%	33.85%	10.85%	1.56%	13.72%	13.59%
Proj. EPS Growth (F1/F0)	-2.56%	5.74%	7.17%	47.41%	-4.20%	-6.70%
Curr. Cash Flow Growth	20.88%	25.30%	8.56%	-36.48%	-14.31%	-15.36%
Hist. Cash Flow Growth (3-5 yrs)	13.94%	20.49%	8.36%	4.16%	2.00%	25.48%
Current Ratio	4.34	3.48	1.23	4.01	6.60	1.90
Debt/Capital	37.11%	21.08%	42.91%	9.61%	36.52%	44.63%
Net Margin	34.83%	21.07%	11.81%	12.52%	35.93%	2.74%
Return on Equity	56.61%	21.75%	16.86%	15.06%	33.82%	24.09%
Sales/Assets	0.82	0.69	0.54	0.82	0.59	0.42
Proj. Sales Growth (F1/F0)	-0.69%	0.94%	3.85%	7.33%	-2.60%	7.45%
Momentum Score	A	-	-	C	A	D
Daily Price Chg	-0.45%	1.40%	0.06%	1.10%	-1.15%	-1.16%
1 Week Price Chg	6.67%	5.74%	2.47%	1.74%	4.01%	4.26%
4 Week Price Chg	1.58%	1.39%	0.59%	-3.40%	2.58%	2.16%
12 Week Price Chg	13.88%	9.75%	6.98%	17.16%	15.71%	19.97%
52 Week Price Chg	23.60%	20.68%	16.62%	108.24%	13.93%	49.41%
20 Day Average Volume	5,073,054	1,536,455	2,020,569	876,194	1,960,063	2,691,814
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	2.49%	-5.06%	-0.05%	15.02%	5.05%	-0.14%
(F1) EPS Est 12 week change	2.49%	-7.32%	-0.17%	15.02%	4.63%	-1.48%
(Q1) EPS Est Mthly Chg	2.27%	1.14%	-0.24%	132.50%	9.60%	0.14%

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	D
Growth Score	B
Momentum Score	A
VGM Score	C

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

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.