

Intel Corporation (INTC)

\$52.25 (As of 09/02/20)

Price Target (6-12 Months): **\$55.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 04/08/20)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:A

Value: A

Growth: A

Momentum: C

Summary

Intel is benefiting from strength across both PC-centric and Data-centric domains. Robust mix of high-performance second-generation Xeon Scalable processors and solid demand from Cloud service providers are expected to boost growth. Strong momentum for 10 nanometer (nm) mobile CPU bodes well. Notably, the company provided encouraging 2020 guidance. Further, solid uptake of 5G networking solutions, higher Wi-Fi and modem sales and solid notebook demand, improvement in NAND pricing trends led higher ASPs, and Optane bit growth, remain tailwinds. However, anticipated decline in PC total addressable market, and production delays pertaining to 7 nm ramp up remain concerns. Notably, shares of Intel have underperformed the industry on a year-to-date basis. Also, coronavirus crisis-led weakness in retail, automotive and industrial end markets is a headwind.

Data Overview

52-Week High-Low	\$69.29 - \$43.63
20-Day Average Volume (Shares)	33,012,924
Market Cap	\$222.2 B
Year-To-Date Price Change	-12.7%
Beta	0.71
Dividend / Dividend Yield	\$1.32 / 2.5%
Industry	Semiconductor - General
Zacks Industry Rank	Bottom 25% (189 out of 251)

Last EPS Surprise	10.8%
Last Sales Surprise	6.4%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	10/22/2020
Earnings ESP	0.0%

P/E TTM	9.3
P/E F1	10.8
PEG F1	1.4
P/S TTM	2.8

Price, Consensus & Surprise



Source: Zacks Investment Research

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021	17,227 E	18,282 E	19,491 E	19,576 E	74,350 E
2020	19,828 A	19,728 A	18,206 E	17,283 E	75,089 E
2019	16,061 A	16,505 A	19,190 A	20,209 A	71,965 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021	\$1.04 E	\$1.18 E	\$1.34 E	\$1.39 E	\$4.89 E
2020	\$1.45 A	\$1.23 A	\$1.10 E	\$1.07 E	\$4.85 E
2019	\$0.89 A	\$1.06 A	\$1.42 A	\$1.52 A	\$4.87 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 09/02/2020. The reports text is as of 09/03/2020.

Overview

Intel Corporation, the world's largest semiconductor company and primary supplier of microprocessors and chipsets, is gradually reducing its dependence on the PC-centric business by moving into data-centric businesses — such as AI and autonomous driving.

In fact, its data-centric businesses accounted for 48.3% of revenues in fiscal 2019. This underscores the fact that the company's data-centric businesses are helping it generate revenues close to what it generates from the PC business. The contribution of data-centric businesses to the total revenues has grown gradually over the past five years and should become significant in the near future.

Nevertheless, the company continues to maintain its dominant market share for microprocessors in both consumer and enterprise markets.

Intel generated \$71.97 billion in revenues in 2019.

Data Center Group (DCG), Internet of Things Group (IOTG), Mobileye, Non-Volatile memory solutions group (NSG) and Programmable solutions Group (PSG) and All Other business units form the crux of Intel's data-centric business model.

DCG accounted for 33% of revenues in 2019. The segment deals with servers, workstations and other products for cloud, enterprise, and communication infrastructure market.

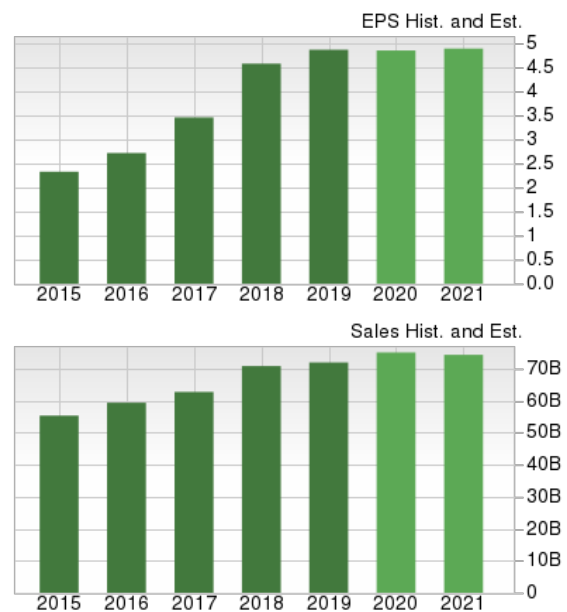
IOTG offers high-performance compute (HPC) solutions and embedded applications. The segment accounted for 5% of 2019 revenues.

NSG contributed 6% to revenues in 2019. The segment primarily offers memory and storage products like Optane and 3D NAND technology, primarily utilizing SSDs.

PSG segment that accounted for 3% of revenues offers programmable semiconductors, primarily FPGAs and structured ASICs.

Mobileye contributed 1% to revenues in 2019. The segment is engaged in developing computer vision and machine learning-based sensing, data analysis, localization, mapping, and driving policy technology for ADAS and autonomous driving. Intel acquired Mobileye in 2018.

Client Computing Group (CCG), which accounted for 52% of 2019 revenues, is the company's largest segment. The company is the dominant provider of computer CPUs. It began shipping 10 nanometer (nm) based 10th generation processors (previously referred to as Ice Lake) in 2019.



Source: Zacks Investment Research

Reasons To Buy:

- ▲ Management strategy has evolved with the changing times. The primary focus area is the data center and cloud, where Intel is doing everything possible to maintain its market share and profitability. Supporting this is continued investment in the Internet of Things (IoT) and non-volatile memory/storage (memory is associated with processing speeds and it also helps increase penetration at customers). Also, while the focus was earlier on making the best computing chips and generating industry-leading margins from them, Intel now prefers to focus on a product range targeting different segments of the market. Management says that the higher-end business in more developed economies continues to look up, but the new strategy should help it get into many more device categories, where Intel products will continue to enjoy a premium based on performance and cost of ownership.
- ▲ We are particularly optimistic about the data center business. The drive to lower-cost computing devices is increasing the pressure on servers that are taking the load off these devices. As more information in various structures and formats are increasingly stored in the cloud, there is demand for a new breed of chips that are more efficient in terms of cost and energy but may not pack in quite as much compute power as in the past. This is the area where many expected lost opportunities for Intel because of its focus on compute power that often proved more expensive and also power guzzling. But Intel has made advancements in this area as well and it is now offering more integrated solutions that will likely be competitive on a cost per watt basis. The company's investments in field programmable gate array (FPGA) for acceleration (dramatically increases performances at low power) and memory to reduce latency and increase speeds are helping it develop custom solutions for big players. Adding Altera and eASIC is also aiding it in strengthening position in the networking segment. Therefore, cloud computing, virtualization, enterprise upgrades and new products (Xeon Scalable) should all drive sales in 2020.
- ▲ Intel may have been late to the mobile market, but it wasted no time getting into the Internet of Things. Market research from Gartner, IDC and other independent firms say that this market will see strong growth over the next few years. Intel's renewed focus on supplying not just chips but associated hardware puts it in a position of strength here. The Altera acquisition should also help. The biggest positive in this respect is the nascent stage of the market, which indicates potential for expanding exponentially. The company generated \$3.82 billion from IoT in 2019 (it mainly focuses on retail, transport, industrial and domestic segments). The products it has showcased thus far look good and Intel continues to introduce new products. It is also making strategic acquisitions (like Recon) to build out the portfolio and further strengthen its position in this emerging market. The company is well positioned to tap the tremendous scope for growth because it is at the forefront of leading-edge processing technology, which will increasingly be required to generate sufficient volumes at low cost.
- ▲ Intel's non-volatile memory business is poised to take off. While NVM has broad application across markets, the company is primarily targeting enterprise/data center customers to drive penetration of this high-margin segment. The company tied up with Micron to develop new memory technologies back in 2006. In 2015, this collaboration yielded the densest 3D NAND technology, which is noteworthy. In March, 2018, Intel launched Optane, its NVM product based on 3D XPoint technology. Per Intel, Optane is the most responsive data center SSD with lower latency than all the fastest NAND flash-based competitors. Also, Intel took forward its long-standing relationship with Micron by updating the terms of their 3D XPoint joint development partnership. The alliance resulted in the development of non-volatile memory that is must faster and more reliable/endurable than NAND.
- ▲ An improving trend in PC shipments is anticipated to favor business prospects of Intel, which continues to depend substantially on PC sales. Per Gartner's preliminary data, PC shipments in second-quarter 2020 improved 2.8% year over year to 64.8 million units. Going by the IDC report, shipments grew 11.2% on a year-over-year basis and totaled 72.3 million in the period under review. Moreover, an improving trend in PC shipments driven by work-from-home and online learning wave is likely to positively impact PC-makers, which bodes well for Intel's growth prospects.
- ▲ Intel's acquisition of Israel-based Mobileye, an autonomous vehicle technology provider is significantly positive in our view. The acquisition will help the company rapidly penetrate the autonomous car technology market, currently dominated by the likes of NVIDIA and Qualcomm. With the buyout, Intel will now have access to Mobileye's technologies related to cameras, in-car networking, sensor-chips, roadway mapping, cloud software, machine learning and data management. This will boost its customer base going forward. In 2019, Mobileye contributed \$879 million to total revenues.

Intel's leading position in PC market, strength in servers, growing clout in software, IoT & ADAS domains and headway in process technology are positive indicators of future growth prospects.

Reasons To Sell:

- ▼ Intel is witnessing intensifying competition in the server, storage and networking markets. The server segment has always generated strong margins and Intel's powerful architecture has always been considered supreme. However, ARM is posing a challenge in the fast-growing micro server segment and its designs have seen adoption at several Intel competitors. The NVIDIA alliance with IBM is likely to increase competition in the HPC accelerator segment and is another indication of competitors teaming up against Intel. The company has been also facing stiff competition from AMD in the commercial PC market.
- ▼ Delay in 7 nm process-based chips is a major concern. The company has detected a defect mode in 7 nm process, which caused yield degradation. Notably, Intel's chips utilize process technologies that are designed in-house. Moreover, the company anticipates decline in the PC total addressable market (TAM) in the second half of 2020, as weakness in economy is likely to offset the spike in coronavirus-led demand, which remains a major concern. Intel anticipates the release of data center GPU design, Ponte Vecchio, in late 2021 or early 2022. The chipmaker now expects initial production shipments of first Intel-based 7 nm client CPU in late 2022 or early 2023. Moreover, initial production shipments of Intel's first in-house-based 7-nm data center CPU design is now scheduled in the first half of 2023. Meanwhile, AMD is currently leveraging Taiwan Semiconductor Manufacturing Company's 7 nm process technology, which is enabling it to deliver its advanced 7 nm chips faster to market. Further, AMD aims to deliver "Zen 4" core architecture, which is "currently in design" utilizing advanced 5 nm process technology. This is a major headwind for Intel. Intense competition is likely to lead to pricing pressure and limit margin expansion at least in the near term.
- ▼ Intel derives a significant proportion of revenues from outside the United States (78% of total revenues in fiscal 2019), subjecting the company to exchange rate volatility. Unfavorable movement in exchange rates of foreign currencies like renminbi, euro, pound sterling, Costa Rican colon, and yen related to the U.S. dollar can adversely impact results and undermine growth potential to some extent.
- ▼ Further, imposition of tariffs owing to trade war between the United States and China, and the coronavirus outbreak, is anticipated to negatively impact growth prospects. The uncertainty over the economic impact of coronavirus crisis has affected investors' confidence and is likely to remain an overhang on the company's performance. Intel anticipates impending global recession is to weigh on IOTG end markets, especially retail and industrial. Moreover, lower automotive production due to lockdowns, is a concern for Mobileye. Additionally, sluggish data center demand across enterprise and government end-markets remains a woe.
- ▼ Moreover, Intel has a leveraged balance sheet. As of Jun 27, 2020, the company's net debt was \$24.82 billion compared with \$19.12 billion as of Mar 28, 2020. Further, to enhance its liquidity position, the chipmaker announced in March, that it is suspending stock repurchases temporarily on account of the COVID-19 crisis. Consequently, the company must constantly generate adequate amount of operating cash flow to service its debt. However, it must be noted that on Aug 20, Intel announced that it will repurchase shares worth \$10 billion under the accelerated share repurchase (ASR) agreement by utilizing the existing cash resources. In a filing with the U.S. Securities and Exchange Commission (SEC), Intel stated that it will receive 166 million shares on Aug 21 from the counterparty financial institution after paying \$10 billion, per the terms of ASR. The final settlement will be completed by the end of 2020.

Intel's delay in launching chips based on 7 nm process, stiff competition from ARM-based devices, and impact of new product costs are major concerns amid significant foreign currency exposure.

Last Earnings Report

Intel Q2 Earnings Report Top Estimates, DCG Growth Aids Revenues

Intel reported second-quarter 2020 non-GAAP earnings of \$1.23 per share, which beat the Zacks Consensus Estimate by 10.8%. The bottom line improved 16% from the year-ago quarter.

Revenues totaled \$19.728 billion, beating the consensus mark by 6.4%. The top line increased 20% year over year.

Segment Revenue Details

Client Computing Group or CCG (48.1% of total revenues) represents Intel's PC-centric business. The company bundles PCs, notebooks, 2-in-1s, tablets and other computing devices under the Client segment, which aids comparison with the PC market numbers provided by IDC and Gartner.

Revenues were up 7% on a year-over-year basis to \$9.496 billion. Higher wi-fi and modem sales and solid notebook demand drove the top line despite weakness in desktop volumes.

Notably, Platform revenues increased 4% year over year to \$8.229 billion. Adjacencies revenues improved 38% from the year-ago quarter to \$1.267 billion. Notably, CCG adjacencies include modem, connected home products, wireless communications and wired connectivity.

While notebook platform volumes increased 14% year over year, desktop platform volumes declined 14%.

PC volumes grew 2% on a year-over-year basis. Further, Notebook's average selling price (ASP) improved 3% year over year, while Desktop ASP increased 3%.

Intel anticipates strong momentum in its first 10-nanometer (nm) mobile CPU — Ice Lake.

Notably, Intel is adding wafer capacity to boost PC unit volumes in a bid to meet market demand.

Data Center Group or DCG (36.1%) revenues improved 43% year over year to \$7.117 billion. Strong mix of high-performance second-gen Xeon Scalable processors, and solid demand for Cloud service providers (CSP) and networking solutions led to the upside.

Platform revenues were up 36% year over year to \$6.181 billion. Adjacencies soared 118% from the year-ago quarter to \$936 million on solid uptake of 5G networking solutions.

DCG Platform unit volumes were up 29% year over year, while ASP rose 5%.

CSP revenues advanced 47% year over year. Further, revenues from Communication service provider increased 44%. Revenues from Enterprise & Government grew 34%.

Internet of Things Group or IOTG revenues declined 32% from the year-ago quarter to \$670 million. The coronavirus crisis-induced weakness in retail, vision and industrial end markets led to year-over-year decline.

Mobileye revenues of \$146 million fell 27% on a year-over-year basis, on account of lower automotive production due to lockdowns. However, increasing proliferation of ADAS and ramp of new IQ programs limited revenue decline.

Total Internet of Things revenues (4.1% of total revenues), comprising IOTG and Mobileye, declined 31.3% year over year to \$816 million.

Non-Volatile Memory Solutions Group or NSG (8.4%) revenues surged 76.5% year over year to \$1.659 billion on improvement in NAND pricing trends, which led to higher ASPs, and Optane bit growth.

Programmable Solutions Group or PSG (2.5%) revenues grew 2.5% from the year-ago quarter to \$501 million, driven by strength across cloud vertical. However, sluggish demand across communications and embedded segments hindered growth.

Intel also has a residual segment, **All Other** (0.7%), which includes results of operations from other adjustments. The segment reported revenues of \$139 million, up 113.8% year over year.

Notably, DCG, IOTG, NSG, PSG, Mobileye and All Other business units form the crux of Intel's data-centric business model. Revenues from the data-centric businesses were \$10.232 billion (51.9% of total revenues), up 34% collectively on a year-over-year basis.

Margins

Non-GAAP gross margin in the reported quarter was 54.8%, which contracted 680 basis points (bps) on a year-over-year basis. Increase in product costs and unfavorable sales mix including rapid adoption of margin dilutive 5G ASIC products led to the decline.

Non-GAAP Research & development (R&D) expenses, and Marketing, General & Administrative (MG&A) expenses decreased 5% year over year to \$4.751 billion.

Non-GAAP operating income surged 18% year over year to \$6.058 billion.

Quarter Ending	06/2020
Report Date	Jul 23, 2020
Sales Surprise	6.39%
EPS Surprise	10.81%
Quarterly EPS	1.23
Annual EPS (TTM)	5.62

Non-GAAP operating margin contracted 40 bps on a year-over-year basis to 30.7%. Negative impact of lower gross margin offset gains from lower spending.

Segment Operating Margin Details

Segment operating margin was 28.9%, expanded 90 basis points (bps) on a year-over-year basis.

CCG operating margin was 30%, compared with the year-ago quarter's 42.3%. The contraction can be attributed to the ramp up of 10 nm products and the pre-PRQ reserves ahead of launch of Tiger Lake processors in the third quarter. These factors more than offset gains from higher CCG revenue base.

DCG operating margin of 43.5% expanded 740 bps year over year driven by higher revenue base and solid mix of high-end compute products.

IOTG operating income came in at \$70 million, compared with operating income of \$294 million in the year-ago quarter, owing to weakness across retail, vision and industrial end markets.

Mobileye operating loss of \$4 million against operating income of \$53 million in the year-ago quarter.

NSG group reported operating income of \$322 million against operating loss of \$284 million in the year-ago quarter.

PSG operating income of \$80 million improved 53.8% from the year-ago quarter.

All Other segment reported a loss of \$712 million compared with a loss of \$1.035 billion reported in the year-ago quarter.

Balance Sheet

As of Jun 27, 2020, cash and cash equivalents, short-term investments and fixed-income trading asset balance were \$13.53 billion compared with \$20.8 billion as of Mar 28, 2020.

Total debt as of Jun 27, 2020, was \$38.35 billion compared with \$39.92 billion as of Mar 28, 2020.

In the second quarter, the company paid out dividends worth \$1.41 billion. The company did not make any share repurchases during the reported quarter.

Markedly, on Mar 24, Intel filed 8K with the SEC, announcing that it is suspending stock repurchases temporarily on account of the COVID-19 crisis. Notably, in October 2019, Intel had announced plans to repurchase shares worth \$20 billion over the next 15-18 months. The company has shares worth \$19.7 billion remaining for repurchase as of Jun 27, 2020.

Guidance

For third-quarter 2020, Intel expects non-GAAP revenues of \$18.2 billion, suggesting decline of 5% year over year.

In the third quarter, both data-centric and PC-centric businesses are anticipated to decline in mid-single digits on a year-over-year basis.

The company anticipates decline in the PC total addressable market (TAM) in the third quarter, as softness in desktop demand and weakness in economy is likely to offset spike in coronavirus-led demand.

Non-GAAP gross margin and operating margin is anticipated to be 57% and 30%, respectively. Gross margin is expected to be affected by accelerated ramp up of 10 nm products and decline in platform revenues that more than offset gains from improvement in NAND pricing.

Non-GAAP earnings are likely to be \$1.10 per share.

For 2020, Intel now projects revenues of \$75 billion and non-GAAP earnings per share to be \$4.85.

Markedly, the company had earlier withdrawn guidance, citing business uncertainty and "limited visibility" pertaining to coronavirus crisis.

Coronavirus crisis-led robust demand across mobile compute, cloud, and network infrastructure for 5G, verticals is a tailwind.

However, impending global recession is likely to weigh on IOTG end markets, especially retail and industrial. Further, lower automotive production due to lockdowns is a concern for Mobileye. Also, sluggish data center demand across enterprise and government end-markets remains a woe. Moreover, 7 nm delay is a headwind.

Recent News

On Sep 2, Intel introduced its 11th generation core processor, dubbed "Tiger Lake" which it claims is best suited for thin and light laptops. The latest processor features Intel Iris Xe graphics that offer maximum frequency of 1.35 GHz.

On Aug 26, Intel declared that it is part of the collaboration with Argonne National Laboratory, in a bid to accelerate research in the quantum computing field. The latest development follows the announcement of creation of five new quantum research centers across the United States by the White House Office of Science and Technology Policy and the U.S. Department of Energy (DOE). These research centers will be managed by DOE-affiliated National Laboratories.

On Aug 20, Intel announced that it will repurchase shares worth \$10 billion under the accelerated share repurchase (ASR) agreement by utilizing the existing cash resources. In a filing with the U.S. Securities and Exchange Commission (SEC), Intel stated that it will receive 166 million shares on Aug 21 from the counterparty financial institution after paying \$10 billion, per the terms of ASR. The final settlement will be completed by the end of 2020.

On Jul 29, Intel in collaboration with Massachusetts Institute of Technology (MIT) and Georgia Institute of Technology (Georgia Tech) unveiled a new machine programming (MP) system. The new system, machine inferred code similarity (MISIM), is an automated engine developed to "learn" the functioning of a software by analyzing code structure and syntactic differences of other codes that resemble similar behavior.

On Jul 16, 2020, Intel announced a quarterly dividend of 33 cents per share. The quarterly dividend is payable on Sep 1, 2020, to shareholders as on Aug 7, 2020.

On Jul 7, Intel's Mobileye announced strategic collaboration with WILLER, one of the leading transportation operators across Taiwan, Japan and the Southeast Asian region, in a bid to introduce an autonomous robotaxi service. The service will commence in Japan, wherein the companies will co-develop the testing and deployment technology of autonomous transportation solutions.

On Jul 6, Intel in partnership with Penguin Computing — a subsidiary of SMART Global Holdings — announced the release of Tundra AP, which is the latest addition to Tundra supercomputing platform. The new supercomputing platform leverages Intel's Xeon Scalable 9200 Series processors to offer high density, enhanced power capacity and efficiency.

Valuation

Intel shares are down 12.7% in the year-to-date period but up 11.2% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 36.7% and 23.7% in the year-to-date period, respectively. Over the past year, the Zacks sub-industry and sector are up 73.5% and 40.7%, respectively.

The S&P 500 index is up 3.8% in the year-to-date period and 15.3% in the past year.

The stock is currently trading at 10.71X forward 12-month earnings, which compares to 23.67X for the Zacks sub-industry, 28.77X for the Zacks sector and 23.18X for the S&P 500 index.

Over the past five years, the stock has traded as high as 14.93X and as low as 8.93X, with a 5-year median of 12.47X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$55 price target reflects 11.27X forward 12-month earnings.

The table below shows summary valuation data for INTC

Valuation Multiples - INTC					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	10.71	23.67	28.77	23.18
	5-Year High	14.93	23.67	28.77	23.18
	5-Year Low	8.93	12.86	16.72	15.25
	5-Year Median	12.47	16.39	19.7	17.6
P/S F12M	Current	2.98	6.34	4.65	3.95
	5-Year High	4.06	6.34	4.65	3.95
	5-Year Low	2.25	2.42	2.32	2.53
	5-Year Median	2.94	4.06	3.15	3.07
EV/Sales TTM	Current	2.95	6.19	4.84	3.25
	5-Year High	4.3	6.19	5.02	3.44
	5-Year Low	2.31	2.34	2.56	2.11
	5-Year Median	3.18	4.15	3.64	2.86

As of 09/02/2020

Industry Analysis Zacks Industry Rank: Bottom 25% (189 out of 251)



Source: Zacks Investment Research

Top Peers

Company (Ticker)	Rec	Rank
Ambarella, Inc. (AMBA)	Neutral	3
Advanced Micro Devices, Inc. (AMD)	Neutral	3
Broadcom Inc. (AVGO)	Neutral	3
Micron Technology, Inc. (MU)	Neutral	5
NVIDIA Corporation (NVDA)	Neutral	4
QUALCOMM Incorporated (QCOM)	Neutral	2
Xilinx, Inc. (XLNX)	Neutral	3
Western Digital Corporation (WDC)	Underperform	5

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Semiconductor - General				Industry Peers		
	INTC	X Industry	S&P 500	AMD	NVDA	XLNX
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	3	-	-	3	4	3
VGM Score	A	-	-	C	B	D
Market Cap	222.22 B	16.09 B	24.30 B	105.92 B	354.07 B	26.60 B
# of Analysts	13	3	14	12	13	9
Dividend Yield	2.53%	0.38%	1.6%	0.00%	0.11%	1.40%
Value Score	A	-	-	F	F	D
Cash/Price	0.12	0.12	0.07	0.02	0.03	0.12
EV/EBITDA	6.66	7.43	13.46	138.78	102.87	25.29
PEG F1	1.44	3.32	3.09	1.79	3.51	4.16
P/B	2.71	1.98	3.25	32.05	25.45	11.47
P/CF	6.87	13.10	13.12	118.62	109.24	26.24
P/E F1	10.77	29.22	22.15	81.83	63.38	37.47
P/S TTM	2.81	2.81	2.57	13.85	27.10	8.75
Earnings Yield	9.28%	3.08%	4.29%	1.22%	1.58%	2.67%
Debt/Equity	0.44	0.31	0.70	0.15	0.50	0.64
Cash Flow (\$/share)	7.60	4.89	6.93	0.76	5.25	4.15
Growth Score	A	-	-	A	A	B
Historical EPS Growth (3-5 Years)	22.01%	22.01%	10.41%	80.17%	37.24%	13.97%
Projected EPS Growth (F1/F0)	-0.33%	-5.25%	-4.75%	72.27%	56.37%	-13.27%
Current Cash Flow Growth	6.53%	-14.35%	5.22%	44.79%	-20.70%	1.35%
Historical Cash Flow Growth (3-5 Years)	9.99%	12.14%	8.49%	27.24%	28.68%	5.96%
Current Ratio	1.97	3.52	1.35	2.10	6.09	3.50
Debt/Capital	30.56%	23.47%	42.92%	12.91%	33.34%	39.14%
Net Margin	29.97%	10.14%	10.25%	7.96%	25.93%	21.22%
Return on Equity	31.55%	13.98%	14.66%	28.66%	30.41%	30.66%
Sales/Assets	0.55	0.62	0.50	1.29	0.64	0.60
Projected Sales Growth (F1/F0)	4.34%	-1.98%	-1.42%	32.03%	44.80%	-3.17%
Momentum Score	C	-	-	D	A	D
Daily Price Change	2.87%	1.94%	1.82%	-2.13%	3.80%	3.37%
1-Week Price Change	2.33%	3.00%	2.59%	2.08%	3.66%	2.85%
4-Week Price Change	6.81%	7.06%	4.80%	5.76%	27.11%	1.20%
12-Week Price Change	-18.19%	3.84%	6.31%	57.07%	53.16%	14.23%
52-Week Price Change	6.81%	9.54%	5.43%	191.50%	240.04%	6.42%
20-Day Average Volume (Shares)	33,012,924	940,777	1,788,967	53,143,144	12,607,164	1,862,582
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	0.00%	4.08%	-0.76%
EPS F1 Estimate 12-Week Change	0.97%	0.49%	3.89%	10.51%	4.16%	7.17%
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.00%	0.00%	10.36%	0.00%

Source: Zacks Investment Research

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	A
Growth Score	A
Momentum Score	C
VGM Score	A

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

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Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as a the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.