Momentum: F



Advanced Energy (AEIS) \$76.86 (As of 02/14/20) Price Target (6-12 Months): \$88.00 Long Term: 6-12 Months | Zacks Recommendation: Outperform (Since: 10/15/19) Prior Recommendation: Neutral Short Term: 1-3 Months | Zacks Rank: (1-5) Zacks Style Scores: VGM:F

Summary

Advanced Energy is riding on cost optimization strategy and strong product pipelines. Positive contributions from Artesyn Embedded Power buyout are driving the top-line growth in industrial and medical market. Also, the acquisition is aiding the company's performance in the data center computing, and telecom and networking markets. Rising investments in foundry/logic is a tailwind. We believe growing design wins across hyperscale and enterprise customers and solid momentum across 5G platforms at infrastructure equipment suppliers will continue to drive business growth. Its strong cost optimization strategy is a positive. However, sluggishness in the semiconductor market owing to low fab utilization is a headwind. Further, weak demand for automotive and industrial applications is a risk. The stock has underperformed its industry over a year.

Data Overview

52 Week High-Low	\$78.49 - \$46.01
20 Day Average Volume (sh)	248,022
Market Cap	\$2.9 B
YTD Price Change	8.0%
Beta	1.61
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Semiconductor Equipment - Wafer Fabrication
Zacks Industry Rank	Top 2% (6 out of 255)

Last EPS Surprise	46.0%
Last Sales Surprise	13.2%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	02/18/2020
Earnings ESP	0.0%
P/E TTM	33.4
P/E F1	23.2
PEG F1	2.3
P/S TTM	4.9

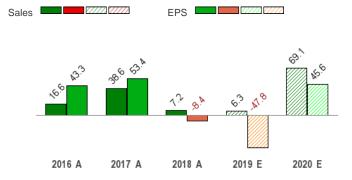
Price, Consensus & Surprise



Value: D

Growth: F

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	312 E	327 E	328 E	324 E	1,292 E
2019	141 A	135 A	175 A	313 E	764 E
2018	196 A	196 A	173 A	154 A	719 A
EPS E	stimates				
	Q1	Q2	Q3	Q4	Annual*
2020	\$0.76 E	\$0.92 E	\$0.94 E	\$0.96 E	\$3.32 E
2019	\$0.58 A	\$0.45 A	\$0.54 A	\$0.70 E	\$2.28 E
2018	\$1.34 A	\$1.25 A	\$1.05 A	\$0.73 A	\$4.37 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 02/14/2020. The reports text is as of 02/17/2020.

Overview

Based in Fort Collins, Colorado, Advanced Energy Industries is a power technology company. The company is one of the leading suppliers of power subsystems and process-control technologies to the semiconductor industry.

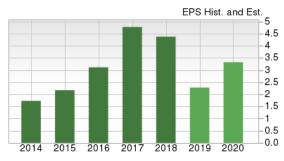
Advanced Energy had undergone a major restructuring in 2015, exiting the solar inverter business.

The company now focuses primarily on power-conversion solutions, including direct current, pulsed DC, low frequency, high voltage, and radio frequency (RF) power supplies, as well as matching networks and remote plasma sources for reactive gas applications and RF instrumentation to leverage the semiconductor, flat panel display, and industrial markets.

Sales Contribution by market in 2018 was as follows—Semiconductor capital equipment accounted for 61.6%, Industrial capital equipment 23.3% and Global Support contributed the remaining 15.1%.

Customers in the semiconductor capital market incorporate products into equipment that make integrated circuits (ICs).

On the other hand, the industrial power capital market is comprised of products for Thin Films Industrial Power and Specialty Power applications.

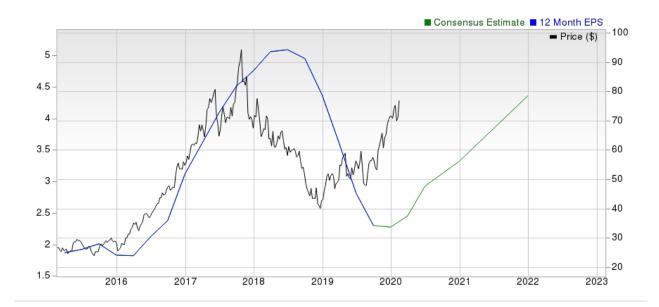




The global service support centers provide local repair and field service capability in key regions. They also provide upgrades and refurbishment services, and contribute to sales of used equipment to businesses that use their products.

In 2018, the company generated \$718.9 million in revenues, up 7.1% from 2017. The company maintains its facilities throughout Asia, Europe and North America.

In 2018, the company had approximately 370 OEMs. Its10 largest customers accounted for 62.5% of total net sales in 2018. Applied Materials and Lam Research each accounted for more than 10% of net sales in 2018.



Reasons To Buy:

A number of factors are expected to drive Advanced Energy's semiconductor revenue base. The most important factor is growing demand for the company's power solutions in advanced semiconductor applications. Increasing investments in complex 3D NAND devices, DRAM and logic are a big positive for the company. Moreover, NAND manufacturers focus on adding more layers. The additional layers should also drive demand for its power-control modules. Based on its portfolio strength, Advanced Energy is well positioned among the leading players, which should help the company generate strong revenues in the upcoming years

Advanced Energy's leading market position, strong semi and industrial demand, strategic acquisitions and impressive balance sheet are major positives.

- ▲ Advanced Energy's Industrial Revenues should continue to grow in the near future. The increasing international customer base and new design wins in China and Korea, among others, present significant growth opportunity for Advanced Energy's Industrial business. Also, the acquisitions of Trek and Excelsys Holdings add to Advanced Energy's industrial portfolio, further expanding its opportunities in this market.
- Advanced Energy has been supplementing organizational growth with strategic acquisitions. When deciding on a target, management generally looks out for a particular niche expertise, which will complement one of its many product lines or round out its portfolio. Recently, the company completed the buyout of LumaSense Technologies. This has expanded the company's product portfolio with the addition of photonic-based measurement and monitoring solutions. Moreover, the deal provides a wider exposure to Advanced Energy in the power intensive industrial applications space. Further, the company's acquisition of Trek has added high voltage and electrostatic technology products to its specialty power products portfolio. In 2017, Advanced Energy acquired Excelsys Holdings, an electronics manufacturer in Ireland. In 2019, the company acquired Artesyn Embedded Power which helped it in making its foray into two new growth markets data center computing, and telecom and networking. These deals are expected to continue aiding its top line growth in the near future.

Risks

- Customer concentration of the company is significant. Advanced Energy's growth profile highly depends on its two large original equipment manufacturers (OEMs), Applied Materials and Lam Research. Advanced Energy generated approximately 51.1% of 2018 revenues from its top two customers. Hence, customer concentration seems to be a perennial problem related to the nature of technology it offers.
- Advanced Energy is exposed to fluctuations in foreign-currency rates as international revenues account for a significant portion of its
 total revenues. The company generates a significant portion of sales internationally, and relies on international suppliers, manufacturing
 partners and distributors. Therefore, fluctuations in foreign-currency rates, changes in political or economic conditions and regulatory
 requirements, among others, could negatively impact the company's operations in the future.
- Acquisitions are part of Advanced Energy's growth strategy to supplement the top line. However, the company's inability to identify
 suitable acquisition candidates, unsuccessful execution and integration of new acquisitions, as well as an increase in acquisition costs due
 to stiff competition could negatively impact sales/margin performance. Large number of acquisitions increases risks of integration issues.

Last Earnings Report

Advanced Energy Beats on Q3 Earnings & Revenues

Advanced Energy Industries reported third-quarter 2019 non-GAAP earnings of 54 cents per share, beating the Zacks Consensus Estimate by 45.9%. Further, the figure was higher than management's guided range of 28-38 cents.

Notably, Artesyn Embedded Power buyout contributed 7 cents per share to the bottom line. Excluding the acquisition, EPS would have been 47 cents.

However, the reported figure declined 48.6% on a year-over-year basis but surged 20% sequentially.

Quarter Ending	09/2019		
Report Date	Nov 12, 2019		
Sales Surprise	13.20%		
EPS Surprise	45.95%		
Quarterly EPS	0.54		
Annual EPS (TTM)	2.30		

Revenues of \$175.1 million surpassed the Zacks Consensus Estimate of \$154.7 million and management's guided range of \$123-\$133 million. Further, the figure improved 1.2% from the year-ago quarter and 30% from the prior quarter.

The top line was driven by solid momentum across Asia during the reported quarter. Further, improving demand in semiconductor equipment market remained positive.

Additionally, positive acquisition contributions remained a major positive. Artesyn Embedded Power buyout accounted for \$41 million of revenues in the reported quarter.

Further, Advanced Energy made foray into two new growth markets – data center computing, and telecom and networking on the back of Artesyn Embedded Power acquisition.

However, the company bore the impact of macro-economic headwinds throughout the third quarter. Further, sluggishness in the semiconductor market persisted as a headwind.

Nevertheless, strong cost optimization strategy, new product design wins and strong product pipelines are likely to help the stock recover in the near term.

Top-Line in Detail

Product revenues improved 2.3% year over year to \$148.1 million (84.6% of total revenues) in the third quarter. This can primarily be attributed to growing semiconductor revenues due to strengthening momentum in semiconductor equipment space and contributions from design wins.

Services revenues decreased 4.4% from the prior-year quarter to \$26.9 million (15.4% of revenues). This can primarily attributed to sluggish semiconductor service revenues. Further, divestiture of U.S. central inverter business impacted the results negatively, without which revenues would have remained flat year over year.

Product Line in Detail

Semiconductor Equipment revenues decreased 19.6% year over year to \$96.4 million (55.1% of the total revenues). This was owing to low fab utilization, which hurt the demand for used equipment and retrofits. However, the company witnessed growing investments in foundry/logic that boosted demand for the company's semiconductor products during the reported quarter.

Industrial & Medical revenues improved 3.9% year over year to \$55.2 million (31.5% of revenues). Contributions from Artesyn Embedded Power acquisition remained positive. Further, motor drive design win drove the revenues further. Additionally, solid performance of the company's portfolio of high and low voltage power supplies in the medical imaging and diagnostic market contributed to revenues. However, weak demand for automotive and industrial applications, manufacturing contraction in Europe, and increased pricing pressure in the solar market is likely to continue weighing on margins.

Telecom & Networking revenues were \$10.02 million (5.7% of revenues). The company benefited from 5G platforms at infrastructure equipment suppliers.

Data Center Computing revenues were \$13.5 million (7.7% of revenues). New design wins across hyperscale and enterprise customers remained a positive.

Operating Results

In third quarter, non-GAAP gross profit was 43.6%, which contracted 640 bps in the year-ago quarter.

Non-GAAP operating expenses as a percentage of total revenues came in 30.5%, which expanded 610 bps year over year.

Further, non-GAAP operating margin was 13.1%, contracting from 25.6% in the prior-year quarter.

Balance Sheet & Cash Flow

As of Sep 30, 2019, cash, cash equivalents and Marketable securities were \$341.1 million compared with \$359.8 million Jun 30, 2019.

During the third quarter, cash flow from operations was \$10.5 million compared with \$11.5 million in the second quarter.

Capital expenditure during the reported quarter stood at \$8.9 million.

Guidance

For fourth-quarter 2019, Advanced Energy expects revenues in the range of \$295-\$325 million.

Non-GAAP earnings is anticipated in the band of 56-80 cents.

Recent News

On Dec 10, 2019, Advance Energy announced the opening of its Advanced Materials Processing (AMP) Showcase Lab near Frankfurt for plasma deposition and materials characterization.

On Oct 22, 2019 Advanced Energy introduced AE's PowerInsight, a big data analytics enabling solution for critical power delivery systems.

On **Sep 18, 2019**, Advanced Energy expanded its partnership with Colorado State University to investigate the application of advanced control techniques to emerging process power applications in a one-year sponsored program.

On **Sep 10, 2019**, Advanced Energy completed the acquisition of Artesyn Embedded Technologies' Embedded Power business. The move helped the company in making foray into two new growth markets – data center computing, and telecom and networking.

Valuation

Advanced Energy shares are up 55.3% in the past six-month period and 50.3% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 48.4% and 22.4% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 75.3% and 29.7%, respectively.

The S&P 500 index is up 16.1% in past the six-month period and 21% in the past year.

The stock is currently trading at 25.21X forward 12-month earnings, which compares to 23.25X for the Zacks sub-industry, 23.17X 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 33.89X and as low as 8.04X, with a 5-year median of 17.19X. Our Outperform recommendation indicates that the stock will perform better than the market. Our \$88 price target reflects 28.94X forward 12-month earnings.

The table below shows summary valuation data for AEIS

Valuation Multiples - AEIS					
		Stock	Sub-Industry	Sector	S&P 500
	Current	25.21	23.25	23.17	19.35
P/E F 12M	5-Year High	33.89	23.25	23.17	19.35
	5-Year Low	8.04	12.36	16.87	15.18
	5-Year Median	17.19	17.24	19.32	17.47
	Current	2.26	6.99	3.79	3.58
P/S F12M	5-Year High	5.58	6.99	3.79	3.58
	5-Year Low	1.65	3.63	2.3	2.54
	5-Year Median	3.16	4.81	3.02	3
	Current	34.52	30.21	13.02	12.31
EV/EBITDA TTM	5-Year High	34.52	30.21	13.02	12.85
	5-Year Low	3.9	9.68	7.68	8.47
	5-Year Median	10.87	19.7	10.53	10.7

As of 02/14/2020

Industry Analysis Zacks Industry Rank: Top 2% (6 out of 255)

■ Industry Price 1.1k - Industry Price 1k

Top Peers

Lam Research Corporation (LRCX)	Outperform
Teradyne, Inc. (TER)	Outperform
Applied Materials, Inc. (AMAT)	Neutral
AMETEK, Inc. (AME)	Neutral
ASML Holding N.V. (ASML)	Neutral
Bruker Corporation (BRKR)	Neutral
KLA Corporation (KLAC)	Neutral
MKS Instruments, Inc. (MKSI)	Neutral

Industry Comparison Industry: Semiconductor Equipment - Wafer Fabrication				Industry Peers		
	AEIS Outperform	X Industry	S&P 500	KLAC Neutral	MKSI Neutral	TER Outperform
VGM Score	E	-	-	В	D	С
Market Cap	2.95 B	55.40 B	24.61 B	27.64 B	6.43 B	11.76 E
# of Analysts	5	6.5	13	6	5	3
Dividend Yield	0.00%	0.94%	1.78%	1.93%	0.68%	0.51%
Value Score	D	-	-	С	C	C
Cash/Price	0.13	0.08	0.04	0.06	0.09	0.08
EV/EBITDA	16.27	16.91	14.06	17.75	19.56	18.39
PEG Ratio	2.32	1.99	2.09	1.48	NA	1.62
Price/Book (P/B)	4.45	8.49	3.29	10.28	3.18	8.04
Price/Cash Flow (P/CF)	16.64	19.16	13.65	17.98	17.21	22.39
P/E (F1)	23.15	21.66	19.21	17.28	19.15	21.38
Price/Sales (P/S)	4.87	5.02	2.70	5.24	3.39	5.12
Earnings Yield	4.32%	4.64%	5.19%	5.79%	5.22%	4.68%
Debt/Equity	0.64	0.61	0.71	1.26	0.43	0.30
Cash Flow (\$/share)	4.62	6.35	6.92	9.80	6.86	3.10
Growth Score	F	-	-	В	D	C
Hist. EPS Growth (3-5 yrs)	20.12%	28.22%	10.85%	29.49%	33.93%	21.08%
Proj. EPS Growth (F1/F0)	45.87%	28.94%	7.17%	20.57%	36.37%	14.73%
Curr. Cash Flow Growth	-0.85%	-14.83%	8.56%	18.14%	-27.43%	-2.68%
Hist. Cash Flow Growth (3-5 yrs)	20.48%	17.53%	8.36%	18.07%	24.71%	8.94%
Current Ratio	2.47	2.53	1.23	2.55	4.51	3.35
Debt/Capital	38.93%	37.70%	42.91%	55.85%	30.11%	22.80%
Net Margin	12.25%	20.25%	11.81%	21.55%	7.39%	20.88%
Return on Equity	13.00%	29.81%	16.86%	50.92%	12.67%	33.43%
Sales/Assets	0.59	0.68	0.54	0.58	0.56	0.86
Proj. Sales Growth (F1/F0)	69.14%	13.05%	3.85%	27.75%	13.80%	13.09%
Momentum Score	F	-	-	С	В	В
Daily Price Chg	-1.39%	-0.72%	0.06%	-1.37%	-2.34%	-3.33%
1 Week Price Chg	1.54%	6.09%	2.47%	-0.39%	5.24%	5.24%
4 Week Price Chg	3.60%	5.41%	0.59%	-2.56%	2.17%	-0.48%
12 Week Price Chg	26.04%	22.25%	6.98%	9.09%	14.42%	13.56%
52 Week Price Chg	51.54%	67.90%	16.62%	64.53%	40.77%	77.49%
20 Day Average Volume	248,022	1,333,311	2,020,569	1,337,011	507,501	2,937,70
(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%	1.99%	-0.05%	3.26%	0.92%	2.70%
(F1) EPS Est 12 week change	2.14%	4.42%	-0.17%	3.26%	1.92%	2.70%
(Q1) EPS Est Mthly Chg	0.00%	5.57%	-0.24%	3.77%	5.80%	48.99%

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	F
Momentum Score	F
VGM Score	F

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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