

Ambarella, Inc. (AMBA)

\$47.55 (As of 07/07/20)

Price Target (6-12 Months): **\$50.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 12/27/18)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

4-Sell

Zacks Style Scores:

VGM:C

Value: F

Growth: A

Momentum: C

Summary

Ambarella is benefiting from its transition to a video AI company. Ramping up of production and shipments in the automotive and security camera market is a key driver. Ambarella's CV portfolio is also attracting customers and helping it expand client base. Customers are also replacing products of HiSilicon with Ambarella, which is a positive for the company. Growing application of computer vision for ADAS and Driver Monitor System is a positive too. However, global tariff issues, export restrictions and hostile macroeconomic conditions remain concerns. Moreover, Ambarella predicts consumer electronics revenues to decline as a percentage of revenues over the next three years, which makes us apprehensive. Also, the pandemic coronavirus is likely to impact Ambarella's supply chain. The stock has underperformed the industry over the past year.

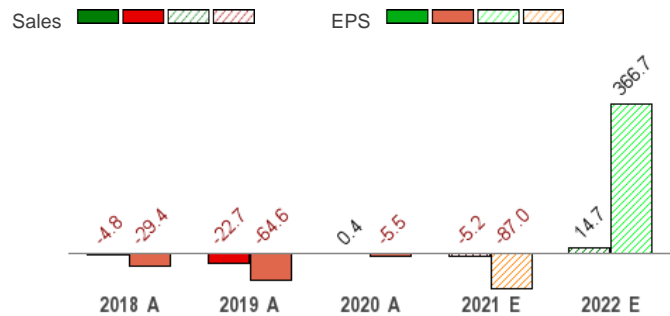
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$73.59 - \$36.02
20 Day Average Volume (sh)	533,800
Market Cap	\$1.6 B
YTD Price Change	-21.5%
Beta	1.26
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Electronics - Semiconductors
Zacks Industry Rank	Top 37% (94 out of 252)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	500.0%
Last Sales Surprise	0.6%
EPS F1 Est- 4 week change	-0.0%
Expected Report Date	09/03/2020
Earnings ESP	100.0%
P/E TTM	67.0
P/E F1	528.3
PEG F1	35.2
P/S TTM	6.9

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	53 E	59 E	68 E	66 E	249 E
2021	55 A	50 E	56 E	54 E	217 E
2020	47 A	56 A	68 A	57 A	229 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$0.00 E	\$0.08 E	\$0.21 E	\$0.17 E	\$0.42 E
2021	\$0.04 A	-\$0.02 E	\$0.07 E	\$0.05 E	\$0.09 E
2020	\$0.01 A	\$0.21 A	\$0.32 A	\$0.14 A	\$0.69 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 07/07/2020. The reports text is as of 07/08/2020.

Overview

Headquartered in Santa Clara, CA, Ambarella Inc. develops video compression and image processing semiconductors, which enables high-definition or HD video capture, share and display.

Ambarella's system-on-a-chip (SoC) designs integrates HD video processing, image processing, audio processing, and system functions onto a single chip, which helps in delivering exceptional video and image quality at high compression rates, differentiated functionality and low power consumption.

The company's products are used in creating video content for wearable sports cameras, automotive aftermarket cameras, and professional and consumer Internet Protocol (IP) security cameras. Its solutions are also used in cameras incorporated into unmanned aerial vehicles, such as UAVs, drones or flying cameras. In the infrastructure market, Ambarella's solutions help in managing IP video traffic, broadcast encoding and transcoding, and IP video delivery applications.

Notably, of all the aforementioned, Ambarella is well known for its sports camera technology. It produces a video processing chip that is the main component in a popular brand of action cameras.

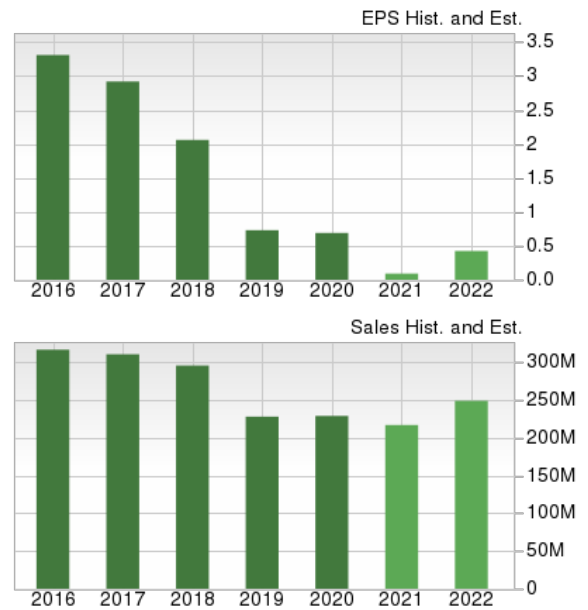
Ambarella caters to the following end markets, namely Professional IP Security Cameras, Consumer IP Security Cameras, Automotive Cameras, Wearable Cameras including Sports, Commercial and Social Media and UAVs or Drones.

Ambarella sells its solutions to original design manufacturers (ODM) and original equipment manufacturers (OEM) through its direct sales force and logistics providers including Wintech Microelectronics. Sales through Wintech accounted for approximately 60% of the company's fiscal 2020 total revenue.

For fiscal 2020, revenues were up 0.4% year over year to \$228.7 million. Sales to customers in Asia accounted for approximately 90% of total revenues in fiscal 2020.

For fiscal 2020, 2019 and 2018, 98% of the company's revenues was attributable to sales of its solutions into the camera markets and 2% of its revenues was attributable to sales of its solutions into the infrastructure market.

The company's primary competitors include Intel, Novatek, Omnivision, Qualcomm, Xilinx, NXP Semiconductors, NVIDIA and Texas Instruments among others.



Reasons To Buy:

- ▲ Ambarella is making steady progress on the development and delivery of computer vision solution based on its CVFlow architecture. The company released CVFlow software developed kits, supporting its CV2 and CV22 SoCs, attracting positive consumer feedback.
- ▲ Ambarella is well known for its market leading high-performance video processing SoCs, which consume lowest power in this space. The company's proprietary video and image processing SoCs are highly configurable, providing it a cost and power advantage against its rivals, which uses multiple expensive semiconductors in their video and image processing solutions. This makes Ambarella a suitable choice for wearable camera, IP camera, automotive dashboard cameras and drone camera makers.
- ▲ New technologies, Internet penetration and invention of smart devices are driving demand for different kinds of cameras and broadcast infrastructure equipment mainly centered on high-definition video and image quality along with advanced features, transmission and analytics. High-definition cameras are now used in varied fields such as sports, medical, automobiles or mobiles, etc. With advancement in technology advancing video processing becoming a must-have feature across various end markets, the industry has huge growth potential. Being one of the most cost and power efficient SoC providers, we believe Ambarella is well positioned to grab the growing opportunity in this space.
- ▲ In a move to diversify its business and lower its dependency on GoPro, Ambarella has forayed into the VR camera space by launching H3 SoC in January 2017. Since then, the company has been continuously expanding its product portfolio in the high-end drones and VR cameras space. Although it will be very tough for Ambarella to compete against well established players such as NVIDIA and Advanced Micro, we believe that given its track record of innovation, the company has the potential to strengthen its position in the space.
- ▲ Nearly all automakers are now in various stages of developing self-driving cars. This has been creating huge demand for camera-based SoCs as well as computer vision technology. Notably, Ambarella already has deep technical knowledge in camera-based SoCs and to enhance its computer vision capabilities. Growing demand for Automated Driver Assistant Systems (ADAS) is a main driver. Design wins for automated parking systems are a positive. Ambarella expects the demand for security cameras with computer vision capability to continue to grow, giving it an opportunity to increase its value contribution per camera, and hence boost top-line.
- ▲ Ambarella has a strong balance sheet with ample liquidity position and less debt obligations. As of Apr 30, 2020, the company had cash and marketable securities of \$411 million. Moreover, long-term debt at the end of its fiscal first-quarter 2021 was only approximately \$9 million. Also, its total debt-to-capital level of 0.02 is much lower than the industry average of 0.42.

Ambarella's efforts toward expanding its reach in other markets, such as IP security, automotive and computer vision application manufacturing and simultaneously, lower dependency on GoPro will drive long-term growth.

Reasons To Sell:

- ▼ Ambarella is well known for its sports camera technology and GoPro is its second largest customer. However, since fiscal 2018, GoPro has been fulfilling its majority of requirements from one of Ambarella's competitors, thus hurting Ambarella's shipment volumes, resulting in revenue decline throughout the fiscal. Softness in the drone market continues to hurt the company's top-line. The company is also hurt by the U.S. ban on security camera purchase from Hikvision and Dahua, causing a lull in near-term orders, especially in the high end of the product range typically associated with its export business.
- ▼ The company is witnessing slowing sales growth rate and deteriorating operating margin. The company, which has registered over 25% sales growth since 2012, registered decline in the last four fiscals. Also, its operating margin, which increased till fiscal 2016, contracted in fiscal 2017, 2018, 2019, and 2020. The downtrend is believed to be mainly due to slowdown in sales of high-margin action cameras, losing business from GoPro and softness in drone market. We believe that the situation is not going to reverse in the near term. Further, the increasing mix of lower margin products being pulled in by Chinese customers fearing a trade ban is likely to be an overhang on margins.
- ▼ Ambarella uses third-party contractors to manufacture, assemble and test its SoCs. Therefore, the company is prone to suppliers risk as any issues with them may cause product delays and result in increased costs, thereby severely impacting its top- and bottom -line performances.
- ▼ Ambarella currently operates in a highly volatile market. Global tariff issues, probable export restrictions and changes in the macroeconomic conditions, which include deleveraging in China, are some unrelenting concerns. Speculations regarding many security camera customers in China to be subjected to U.S. Government Regulations are feared to limit or restrict the company's shipments to them. Higher import tariffs on customers based both in China and outside the country are headwinds.

Global tariff issues, probable export restrictions and changes in the macroeconomic conditions are key headwinds for the company.

Last Earnings Report

Ambarella Tops Q1 Earnings and Revenue Estimates

Ambarella reported better-than-expected first-quarter fiscal 2021 results. The company reported non-GAAP earnings of 4 cents per share for the quarter, while the Zacks Consensus Estimate was pegged at a loss per share of a penny. Moreover, quarterly earnings reflect a sharp improvement from the year-ago quarter's break-even earnings.

The company's fiscal first-quarter revenues of \$54.6 million marginally beat the consensus mark of \$54 million. The top line increased 16% year over year. Its transition to a video AI company is a tailwind. However, softness in the automotive camera market slightly hurt Ambarella's overall revenue growth in the quarter.

Ambarella's CV portfolio is also attracting customers, helping it expand the client base. During the earnings conference call, the company revealed five new CV customers that it gained during the fiscal first quarter. Ambarella's CV portfolio represented mid-single-digit percent in total revenues.

On a non-GAAP basis, the company reported gross margin of 59.1%, which was 50 basis points lower than the year-ago quarter's figure. The fiscal first-quarter non-GAAP gross margin was toward the higher-end of management's guided range of 57.5-59.5%.

Sequentially, non-GAAP operating expenses came in at \$31.9 million compared with the year-ago quarter's \$29.9 million.

Ambarella ended fiscal first-quarter with cash and cash equivalents & marketable securities of \$411 million, up from the \$405 million recorded as of Jan 31, 2020. During the quarter, the company generated an operating cash flow of \$7.6 million.

Outlook

For second-quarter fiscal 2021, revenues are expected to be \$50 million (+/-6%). Non-GAAP gross margin is anticipated to be 59-60.5%. Non-GAAP operating expenses are projected at \$31-\$33 million.

Ambarella is concerned about the coronavirus pandemic's impact on its China and non-China supply chains. The company expects order pushouts as well as cancellations to continue in the current quarter due to the coronavirus-led business disruptions.

Quarter Ending **04/2020**

Report Date	Jun 02, 2020
Sales Surprise	0.63%
EPS Surprise	500.00%
Quarterly EPS	0.04
Annual EPS (TTM)	0.71

Recent News

On Jan 6, Ambarella collaborated with Lumentum and ON Semiconductor to provide 3D sensing platform for access control and smart video security solutions.

On the same day, the company also introduced the CV22FS and CV2FS automotive camera SoCs with CVflow AI processing and ASIL B compliance to enable safety-critical applications.

On Jan 2, Ambarella announced that it will demonstrate its new robotics platform during CES 2020. On the same day, it was revealed that Ambarella and AWS customers can now use Amazon SageMaker Neo to train ML models once and run them on any device equipped with an Ambarella CVflow-powered AI vision SoC.

Valuation

Shares of Ambarella have declined 21.4% in the year-to-date (YTD) period while gained 5.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector have gained 2.7% and 14%, respectively, YTD. Over the past year, the Zacks sub-industry and the sector increased 28.3% and 26.3%, respectively.

The S&P 500 Index has plunged 2.1% YTD while has gained 6.1% in the past year.

The stock is currently trading at 7.08X forward 12-month sales, which compares to 6.73X for the Zacks sub-industry, 3.94X for the Zacks sector and 3.54X for the S&P 500 index.

Over the past five years, the stock has traded as high as 11.13X and as low as 3.06X with a 5-year median of 5.5X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$50 price target reflects 7.43X forward 12-month sales.

The table below shows summary valuation data for AMBA

Valuation Multiples - AMBA					
		Stock	Sub-Industry	Sector	S&P 500
P/S F12M	Current	7.08	6.73	3.94	3.54
	5-Year High	11.13	6.73	3.94	3.54
	5-Year Low	3.06	4.88	2.29	2.54
	5-Year Median	5.50	5.89	3.07	3.01
P/B TTM	Current	3.58	8.74	6.13	4.41
	5-Year High	14.66	8.74	6.13	4.52
	5-Year Low	2.46	3.19	3.19	2.82
	5-Year Median	3.87	5.69	4.38	3.63
EV/Sales TTM	Current	5.20	6.88	4.85	3.16
	5-Year High	14.72	6.88	4.85	3.29
	5-Year Low	2.47	2.62	2.62	2.14
	5-Year Median	4.65	5.25	3.64	2.82

As of 07/07/2020

Industry Analysis Zacks Industry Rank: Top 37% (94 out of 252)



Top Peers

Company (Ticker)	Rec	Rank
Cirrus Logic, Inc. (CRUS)	Neutral	3
Intel Corporation (INTC)	Neutral	3
NVIDIA Corporation (NVDA)	Neutral	2
NXP Semiconductors N.V. (NXPI)	Neutral	3
QUALCOMM Incorporated (QCOM)	Neutral	3
Sony Corporation (SNE)	Neutral	3
Texas Instruments Incorporated (TXN)	Neutral	3
Xilinx, Inc. (XLNX)	Neutral	2

Industry Comparison Industry: Electronics - Semiconductors				Industry Peers		
	AMBA	X Industry	S&P 500	INTC	NVDA	QCOM
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	4	-	-	3	2	3
VGM Score	C	-	-	A	F	B
Market Cap	1.63 B	835.02 M	21.64 B	246.88 B	242.85 B	103.65 B
# of Analysts	10	3	14	14	13	10
Dividend Yield	0.00%	0.00%	1.92%	2.26%	0.16%	2.82%
Value Score	F	-	-	B	D	B
Cash/Price	0.26	0.20	0.07	0.08	0.07	0.10
EV/EBITDA	-39.70	5.72	12.68	7.53	68.75	11.03
PEG Ratio	35.52	1.65	2.88	1.62	2.96	1.44
Price/Book (P/B)	3.58	2.56	3.01	3.23	18.54	34.04
Price/Cash Flow (P/CF)	NA	13.91	11.66	7.67	75.17	22.08
P/E (F1)	532.78	20.03	21.31	12.12	50.00	25.28
Price/Sales (P/S)	6.91	2.41	2.30	3.26	20.62	4.19
Earnings Yield	0.19%	1.91%	4.43%	8.25%	2.00%	3.95%
Debt/Equity	0.02	0.13	0.76	0.48	0.57	4.42
Cash Flow (\$/share)	-0.97	0.57	6.94	7.60	5.25	4.17
Growth Score	A	-	-	B	C	B
Hist. EPS Growth (3-5 yrs)	-49.86%	3.40%	10.90%	21.32%	40.62%	-8.67%
Proj. EPS Growth (F1/F0)	-86.81%	1.66%	-9.72%	-1.20%	36.39%	2.97%
Curr. Cash Flow Growth	9.54%	-2.20%	5.51%	6.53%	-20.70%	-22.34%
Hist. Cash Flow Growth (3-5 yrs)	NA%	10.45%	8.55%	9.99%	28.68%	-10.62%
Current Ratio	8.91	3.35	1.30	1.74	10.29	1.57
Debt/Capital	1.60%	13.80%	44.46%	32.32%	36.34%	81.54%
Net Margin	-18.18%	1.51%	10.62%	30.02%	28.17%	16.36%
Return on Equity	-9.00%	3.12%	15.75%	31.64%	28.59%	69.92%
Sales/Assets	0.46	0.64	0.55	0.55	0.66	0.75
Proj. Sales Growth (F1/F0)	-5.24%	3.69%	-2.57%	2.75%	32.57%	-14.28%
Momentum Score	C	-	-	B	F	D
Daily Price Chg	1.62%	-2.08%	-1.54%	-2.07%	0.33%	-0.84%
1 Week Price Chg	0.78%	3.86%	3.66%	2.83%	4.99%	4.37%
4 Week Price Chg	-13.34%	-4.48%	-6.66%	-7.50%	9.13%	2.66%
12 Week Price Chg	-4.31%	17.67%	7.04%	-3.87%	39.06%	18.81%
52 Week Price Chg	5.13%	17.54%	-6.88%	22.11%	151.01%	20.37%
20 Day Average Volume	533,800	250,266	2,385,506	24,583,088	10,216,869	8,894,775
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-0.02%	0.00%	0.00%	0.09%	-0.03%	0.00%
(F1) EPS Est 12 week change	-9.70%	-2.69%	-8.21%	-0.55%	5.25%	-16.30%
(Q1) EPS Est Mthly Chg	0.66%	0.00%	0.00%	0.22%	-0.07%	0.00%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	A
Momentum Score	C
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.

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