

Universal Display (OLED)

\$190.21 (As of 01/27/20)

Price Target (6-12 Months): \$204.00

Long Term: 6-12 Months	Zacks Recor	Neutral			
	(Since: 10/30/19)				
	Prior Recommendation: Outperform				
Short Term: 1-3 Months	Zacks Rank: (1-5) Zacks Style Scores:		3-Hold		
			VGM:B		

Summary

Universal Display's top line is benefiting from a surge in material sales, and green emitter sales. Improving demand from panel makers based in Korea and China hold promise. Moreover, synergies from the Adesis acquisition are aiding the company. Further, its efforts to reward shareholders through dividend payments are noteworthy. Notably, shares of Universal Display have outperformed the industry in the past year. Further, growing clout of OLED panels in automotive end-markets is a tailwind. However, intensifying competition and long lead times are primary headwinds. Moreover, significant customer concentration from a few customers like Samsung and LG is an overhang. Further, short-term headwinds owing to coronavirus crisis remain a concern.

Price, Consensus & Surprise

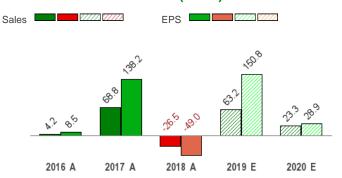


Data Overview

52 Week High-Low	\$230.32 - \$100.97
20 Day Average Volume (sh)	397,484
Market Cap	\$9.0 B
YTD Price Change	-7.7%
Beta	1.51
Dividend / Div Yld	\$0.40 / 0.2%
Industry	Electronics - Miscellaneous Components
Zacks Industry Rank	Bottom 26% (189 out of 255)

Last EPS Surprise	36.8%
Last Sales Surprise	15.1%
EPS F1 Est- 4 week change	0.0%
Expected Report Date	02/20/2020
Earnings ESP	0.0%
P/E TTM	68.9
P/E F1	47.4
PEG F1	1.6
P/S TTM	24.0

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2020	99 E	114 E	146 E	140 E	497 E
2019	88 A	118 A	98 A	97 E	403 E
2018	44 A	56 A	78 A	70 A	247 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2020	\$0.75 E	\$0.93 E	\$1.34 E	\$1.19 E	\$4.01 E
2019	\$0.66 A	\$0.92 A	\$0.78 A	\$0.72 E	\$3.11 E
2018	\$0.13 A	\$0.23 A	\$0.48 A	\$0.40 A	\$1.24 A
*Quarterly	y figures may no	t add up to anni	ual.		

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/27/2020. The reports text is as of 01/28/2020.

Overview

Ewing, NJ-based Universal Display Corporation is a leading developer of technology and intellectual property (IP) for the Organic Light Emitting Diodes (OLED) market.

OLEDs are thin, lightweight and power-efficient solid-state devices that emit light.

OLEDs can be manufactured on both flexible and rigid substrates, making them highly suitable for use in full-color displays and also as lighting products.

Unlike LEDs, OLEDs can be viewed directly and doesn't need diffusers. It is also expected to be cost-effective when manufactured in high volumes, which makes it suitable for commercial application in the solid-state lighting market.

OLED is suitable for commercial usage in a number of industries, including smartphones, television, virtual reality devices and automotive markets.

The company's UniversalPHOLED phosphorescent OLED technology produces OLEDs that are four times more efficient than fluorescent OLEDs.

Universal Display reported revenues of \$247.4 million in 2018.



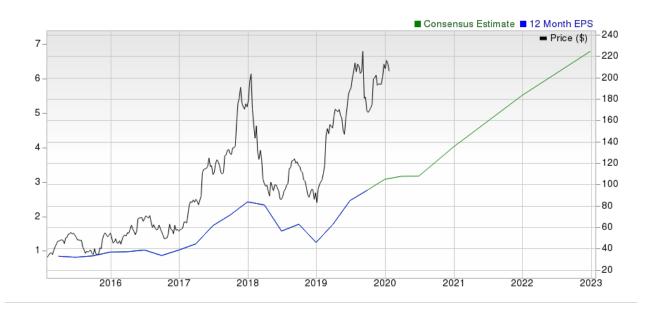
Material sales include revenues from both phosphorescent emitter and host materials.

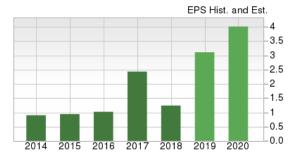
Royalty and license fees include fee payments under patent license agreement with SDC, and licensed sales and royalties from customers.

Contract research services include revenues earned by Adesis, which performs organic and organometallic synthetics research, development and commercialization on a contractual basis for the company's customers. It also includes technology development and support revenues along with government contracts.

Notably, almost 94.4% revenues were generated from non-U.S. locations in 2018.

Country wise, South Korea accounted for 69.5% of revenues, followed by China contributing almost 21%.







Reasons To Buy:

▲ Universal Display is a dominant provider of OLED technology. The technology is expected to eventually replace LED and liquid crystal displays (LCD) technologies due to energy efficiency, higher contrast ratio, better viewing angle, lower video response time and smaller form factor. These superior properties of OLED provide ample room for growth that brightens up Universal Display's prospects.

Dominance in the OLED market, solid patent portfolio, strong endmarket demand, solid balance sheet and liquidity position favor growth prospects of the company.

▲ We believe strong end-market demand presents significant growth opportunity for Universal Display over the long term. OLED is suitable for commercial usage in a number of industries, including smartphones, television, virtual reality devices and automotive markets. The

increasing proliferation of smartphones, wearables and tablets are driving adoption of small-area OLEDs. Large-area OLED displays are increasingly used in televisions. Further, unlike LEDs, OLEDs can be viewed directly and doesn't need diffusers. It is also expected to be cost-effective when manufactured in high volumes, which makes it suitable for commercial application in the solid-state lighting market. UBI market research firm expects OLED lighting market to grow to approximately \$1.6 billion by 2020.

- ▲ Moreover, OLED technology produces uniform illumination over arbitrary shapes that make OLED lighting very attractive to the automobile manufacturers. Increasing adoption of OLED is expected among automotive makers like BMW, Mercedes Benz and Audi. Per Samsung automotive display market is expected to see a 9% CAGR from 2018 to 2022. However, the company forecasts automotive OLEDs to grow at a much faster rate over the same period. Further, per Market Study Report, as revealed by MarketWatch, automotive OLED lighting market is projected to hit \$21 million by 2024 at a CAGR of 93.1% between 2019 and 2024. This provides significant growth opportunities to Universal Display. Further, growing clout of OLED display panels in smartphone end market, rising demand for 4K as well as emerging demand for 8K in TV display panels, increasing investments in construction of new OLED panel manufacturing facilities enhances the growth prospects of Universal Display. In fact, per MarketsandMarkets data, display panel market is projected to reach \$167.7 billion by 2024, witnessing a CAGR of 4%, from estimated valuation of \$137.7 billion in 2019.
- ▲ Universal Display's dominance in OLED technology is primarily driven by its strong portfolio of 5,000 patents issued and pending worldwide. Notably, the company's UniversalPHOLED phosphorescent OLED technology produces OLEDs that are four times more efficient than fluorescent OLEDs and significantly more efficient than current LCDs. This provides Universal Display with a competitive advantage over other OLED makers. Additionally, collaborations with the likes of Princeton University, the University of Southern California, the University of Michigan and PPG Industries will continue to strengthen its patent portfolio in the long haul.
- ▲ The strong patent portfolio also helps Universal Display earn significant licensing revenues. Samsung Display Co., Ltd. (SDC), LG Display, BOE Technology, Visionox and Tianma are notable users of the company's licenses. Universal Display also has license agreements with Konica Minolta, Sumitomo, Lumiotec, Pioneer, Kaneka and OLEDWorks to manufacture OLED lighting products.
- ▲ Universal Display's solid balance sheet and liquidity position is noteworthy. As on Sep 30, 2019, the company had cash and cash equivalents (including short-term investments) of \$597.1 million compared with \$552.7 million at the end of previous quarter. The strong cash balance will not only help it pursue strategic acquisitions but also enable it to repurchase shares aggressively in the long haul. Further, the company generated \$137.7 million as cash from operating activities for the nine months ended Sep 30, 2019. The company also approved a quarterly cash dividend payment of 10 cents per share. We believe efforts to reward shareholders through dividend payments deserves a special mention. The company has paid out quarterly dividends worth \$14.1 million for the nine months ended Sep 30, 2019.

Reasons To Sell:

- ▼ OLED adoption is still in very early stages and is expected to take some time to gain significant traction. Additionally, long lead times for incremental capacity addition are a headwind. Moreover, the recent accounting rules increase volatility in licensing revenues. These factors don't bode well for investors at least in the near term.
- ▼ Moreover, sluggishness in premium smartphone market doesn't bode well for the company. Further, Universal Display faces significant competition not only from other OLED makers but also from other emerging technologies like quantum dots or thermally activated delayed fluorescence (TADF). Also, LCD continues to dominate the display market. Increasing

 **Total Continues of the display market increasing appropriate and the display market. Increasing appropriate and the display market.

 **Total Continues of the display market increasing appropriate and the display market.

 **Total Continues of the display mar
- Long lead times, intensifying competition, significant customer concentration, stretched valuation and volatility in foreign exchange are key headwinds.
- competition can hurt the company's market share as well as pricing power that will negatively impact profitability in the near term.
- ▼ The company has substantial operations outside the United States. Approximately 94.4% of revenues in 2018 were derived from sales to customers outside the United States. Hence, volatility in foreign exchange is a significant concern.
- ▼ Further, Universal Display faces significant customer concentration, as a huge chunk of revenues come from few customers like Samsung and LG.
- ▼ Moreover, the company is trading at premium in terms of Price/Book (P/B). Universal Display currently has a trailing 12-month P/B ratio of 11.39. This level compares unfavorably with what the industry witnessed in the last year. Consequently, the valuation looks slightly stretched from P/B perspective.

Last Earnings Report

Universal Display Tops Q3 Earnings & Revenues

Universal Display Corporation reported third-quarter 2019 adjusted earnings of 78 cents per share surpassing the Zacks Consensus Estimate by 36.8%. The figure improved 62.5% year over year.

Revenues increased 25.7% to \$97.5 million and outpaced the Zacks Consensus Estimate of \$85 million.

09/2019		
Oct 30, 2019		
15.09%		
36.84%		
0.78		
2.76		

Segment Details

Material sales (53.2% of total revenues) inched up 1.2% from the year-ago quarter to \$51.8 million. Green emitters sales (including yellow-green emitters) were \$40.2 million, up 10.4% year over year. Red emitter sales were \$11.4 million, down 21.9% year over year.

Royalty and license fees (44.1% of total revenues) increased 84.4% year over year to approximately \$43 million.

Adesis revenues came in at \$2.7 million compared with \$3 million reported in the year-ago quarter.

Contract research services revenues came in at \$2.7 million, representing the remaining 2.7% of total revenues. The figure declined 10.7% year over year.

Operating Details

Gross margin during the quarter under review came in at 82.3%, expanding 310 bps from the year-ago quarter. Material gross margin contracted 250 bps year over year to 70.6%.

Operating expense during the reported quarter came in at \$39.4 million, up 11.3% year over year. As a percentage of revenues, the figure came in at 40.4%, contracting from the year-ago figure of 57.6%.

Consequently, operating margin of 41.9% expanded 830 bps on a year-over-year basis.

Balance Sheet & Cash Flow

As on Sep 30, 2019, Universal Display had cash and cash equivalents (including short-term investments) of \$597.1 million compared with \$552.7 million at the end of previous quarter.

The company generated \$137.7 million as cash from operating activities for the nine months ended Sep 30, 2019.

The company recently approved a quarterly cash dividend payment of 10 cents per share to be paid on Dec 31, 2019 to shareholders as on Dec 13, 2019.

Guidance

Universal Display updated guidance for fiscal 2019. The company now anticipates revenues between \$400 million and \$410 million, under ASC 606 (previously \$370 million and \$390 million).

Under ASC 605, the company anticipates revenues to be in the range of \$435 million to \$440 million (previously \$425 million to \$435 million).

Recent News

On Jan 27, 2020, a MarketWatch report revealed that Susquehanna's analyst estimates Universal Display to be impacted by the coronavirus crisis owing to the company's inability to ship products to Wuhan, located in Hubei province of China.

On Dec 12, 2019, Universal Display announced the appointment of Celia M. Joseph and Cynthia J. Comparin as independent members to its board of directors, effective Jan 1, 2020.

On Oct 30, 2019, Universal Display approved a quarterly cash dividend payment of 10 cents per share to be paid on Dec 31, 2019 to shareholders as on Dec 13, 2019.

On Sep 4, 2019, Universal Display entered into OLED host partnership with Korea-based chemical company, LG Chem, Ltd.

On Aug 22, 2019, Universal Display declared partnership with China-based OLED materials supplier, Eternal Material Technology Company ("EMT").

Per the terms of the latest OLED host partnership, EMT will manufacture and sell Universal Display's green, red and yellow host materials to select panel manufacturers based in China.

Valuation

Universal Display shares are down 11.1% in the past six-month period and up 86.6% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 8.2% and 14.4% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 25.8% and 36.2%, respectively.

The S&P 500 index is up 10.7% in the past six-month period and 26.8% in the past year.

The stock is currently trading at 46.14X forward 12-month earnings compared with 21.77X for the Zacks sub-industry, 22.91X for the Zacks sector and 18.94X for the S&P 500 index.

Over the past five years, the stock has traded as high as 80.8X and as low as 21.26X, with a 5-year median of 47X. Our Neutral recommendation indicates that the stock will perform in line with the market. Our \$204 price target reflects 49.51X forward 12-month earnings.

The table below shows summary valuation data for OLED

Valuation Multiples - OLED						
		Stock S	ub-Industr	y Sector	S&P 500	
*	Current	46.14	21.77	22.91	18.94	
P/E F12M	5-Year High	80.8	21.77	22.91	19.34	
	5-Year Low	21.26	13.72	16.87	15.18	
	5-Year Median	47	16.48	19.24	17.45	
	Current	17.71	2.06	3.72	3.52	
P/S F12M	5-Year High	26.69	2.06	3.72	3.52	
	5-Year Low	6.91	0.92	2.3	2.54	
	5-Year Median	13.48	1.4	3.01	3	
	Current	22.39	2.26	4.39	3.3	
EV/Sales TTM	5-Year High	29.27	2.31	4.39	3.3	
	5-Year Low	6.11	1.07	2.56	2.16	
	5-Year Median	14.97	1.73	3.46	2.8	

As of 01/27/2020

Industry Analysis Zacks Industry Rank: Bottom 26% (189 out of 255)

■ Industry Price Industry -80 -60 -40 -20

Top Peers

Fabrinet (FN)	Outperform
CalAmp Corp. (CAMP)	Neutral
Corning Incorporated (GLW)	Neutral
IntriCon Corporation (IIN)	Neutral
SMTC Corporation (SMTX)	Neutral
TE Connectivity Ltd. (TEL)	Neutral
Vicor Corporation (VICR)	Neutral
Vishay Precision Group, Inc. (VPG)	Neutral

Industry Comparison Ind	ndustry Comparison Industry: Electronics - Miscellaneous Components			Industry Peers		
	OLED Neutral	X Industry	S&P 500	GLW Neutral	SMTX Neutral	VICR Neutra
VGM Score	В	-	-	С	Α	C
Market Cap	8.96 B	228.62 M	23.86 B	21.97 B	105.37 M	2.13
# of Analysts	5	2	13	6	1	
Dividend Yield	0.21%	0.00%	1.81%	2.80%	0.00%	0.00%
Value Score	F	-	-	В	В	F
Cash/Price	0.06	0.12	0.04	0.04	0.01	0.0
EV/EBITDA	421.37	9.41	13.94	9.88	17.63	48.5
PEG Ratio	1.60	1.79	2.00	1.97	NA	N/
Price/Book (P/B)	11.39	1.90	3.25	2.03	2.64	10.50
Price/Cash Flow (P/CF)	623.11	12.35	13.46	7.71	13.85	51.66
P/E (F1)	47.99	20.04	18.67	15.88	17.05	47.89
Price/Sales (P/S)	23.99	1.26	2.62	1.87	0.29	7.78
Earnings Yield	2.11%	4.93%	5.35%	6.30%	5.87%	2.09%
Debt/Equity	0.00	0.17	0.72	0.57	1.09	0.0
Cash Flow (\$/share)	0.31	1.01	6.92	3.71	0.27	1.0
Growth Score	В	-	-	C	Α	В
Hist. EPS Growth (3-5 yrs)	27.45%	17.79%	10.68%	5.83%	NA	N/
Proj. EPS Growth (F1/F0)	29.00%	10.18%	7.51%	3.45%	195.65%	144.44%
Curr. Cash Flow Growth	-88.79%	4.62%	13.40%	1.78%	-275.22%	401.89%
Hist. Cash Flow Growth (3-5 yrs)	-18.22%	11.21%	8.78%	1.17%	24.65%	38.00%
Current Ratio	4.93	2.33	1.22	1.71	1.18	5.7
Debt/Capital	0.00%	16.90%	42.92%	32.16%	52.04%	0.00%
Net Margin	35.10%	6.31%	11.39%	10.41%	-2.26%	7.20%
Return on Equity	17.81%	10.99%	17.19%	15.19%	7.03%	10.21%
Sales/Assets	0.38	0.90	0.54	0.43	1.67	1.20
Proj. Sales Growth (F1/F0)	23.42%	1.55%	4.09%	1.80%	6.12%	25.51%
Momentum Score	Α	-	-	D	В	Α
Daily Price Chg	-7.70%	-0.73%	-1.40%	-2.72%	-2.60%	-0.48%
1 Week Price Chg	-3.19%	-0.29%	-1.09%	-2.33%	0.00%	-2.51%
4 Week Price Chg	-8.47%	0.00%	-0.25%	-1.55%	9.01%	14.96%
12 Week Price Chg	-5.63%	3.23%	3.64%	-4.99%	72.81%	40.84%
52 Week Price Chg	85.93%	10.00%	18.08%	-5.93%	-36.44%	29.819
20 Day Average Volume	397,484	34,638	1,615,215	4,847,998	83,680	215,61
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	-2.44%	0.00%	0.009
(F1) EPS Est 4 week change	0.00%	0.00%	0.00%	-2.71%	0.00%	0.00%
(F1) EPS Est 12 week change	3.27%	-5.02%	-0.17%	-3.92%	15.79%	0.00%
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	-5.56%	0.00%	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.

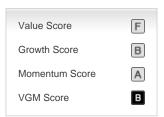
Zacks Rank

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.



As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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

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

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

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

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

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