Zacks Small-Cap Research

August 7, 2017

Lisa Thompson
312-265-9517
lthompson@zacks.com

scr.zacks.com

10 S. Riverside Plaza, Chicago, IL 60606

O2Micro International Ltd (OIIM-NASDAQ)

TV Panel Shortage Continues to Impede O2Micro's Growth

Using an industry average value to trailing 12-month sales of 4.8 times, and applying it to OIIM's $60 m trailing 12-month revenue, we would calculate an enterprise value of $288, a market cap of $335 m and a price of **$12.95 per share.**

Current Price (08/04/17)	$1.67
Valuation	**$12.95**

OUTLOOK

O_2Micro International is a fabless semiconductor firm that designs, develops and markets high performance integrated circuits primarily for power management and battery management for TV backlighting, LED lighting, and portable tools and appliances. It has had declining revenues and losses for the past few years, but has just reported three quarters of revenue growth. The company trades at an enterprise value of negative $3.8 million, below the value of its non-cash assets.

SUMMARY DATA

52-Week High	**$2.74**
52-Week Low	**$1.57**
One-Year Return (%)	**-13.0**
Beta	**0.11**
Average Daily Volume (sh)	**31,863**
Shares Outstanding (mil)	**26**
Market Capitalization ($mil)	**$43**
Short Interest Ratio (days)	**1.1**
Institutional Ownership (%)	**39**
Insider Ownership (%)	**8**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**-11.5**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/M**
P/E using 2017 Estimate	**N/M**
P/E using 2018 Estimate	**N/M**
Zacks Rank	**N/A**

Risk Level	**Average**
Type of Stock	**Small-Value**
Industry	**Elec Comp-Semis**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2015	13.1 A	14.7 A	13.7 A	13.4 A	55 A
2016	13.0 A	13.2 A	14.4 A	15.9 A	57 A
2017	15.0 A	14.5 A	15.2 E	17.0 E	62 E
2018					71 E

Earnings per Share
(EPS is non-GAAP earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2015	-$0.11 A	-$0.09 A	-$0.07 A	-$0.10 A	-$0.37 A
2016	-$0.08 A	-$0.06 A	-$0.04 A	$0.01 A	-$0.16 A
2017	-$0.04 A	-$0.04 A	-$0.04 E	$0.01 E	-$0.12 E
2018					-$0.05 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

© Copyright 2017, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

Company Reports Revenues at the Low End And Points to Panel Shortages

O2Micro reported Q2 2017 revenues of $14.5 million at the low end of its guidance and below the $15 million we expected. These revenues however generated higher profits and non-GAAP EPS came in as expected at a loss of $0.04. Revenues for the quarter grew 10% making that the fourth quarter in a row of revenue growth. The company continues to be hurt by the shortage in panels for high-end TVs and fingerprint recognition IC chips constraining customer's production. Add to that the continuous decline in the notebook market—which had been as much as 15% of the company's revenues and the company continues to face challenges. The company projects cash breakeven can be reached at $15.5 - 17 million in quarterly revenues and profitability at $17-19 million. Guidance for Q3 is sequential growth of 2-8%, which certainly puts the company in the cash breakeven ballpark. And Q4 could reach the $17 million.

Gross margin was 50.9%, similar to last year's 50.7%. Operating expenses in the quarter were $8.9 million versus $8.8 million last year. Spending has been moving out of SG&A into R&D. Operating losses were reduced from $2.1 million in 2016 to $1.6 million as the company grows revenues back to profitability and continues to control costs. Non-operating income and expenses consisting of interest income, rental income, and foreign exchange losses, were flat with last year at $400,000.

Non-GAAP net income was a loss of $1.0 million versus a loss of $2.0 million. The company reported non-GAAP EPS loss of $0.04 versus $0.08 last year. We expect there could be some monetization of assets between now and year end-- as in the sale of some real estate.

At June 30, 2017, the company had $47.5 million in cash and equivalents (or $1.84 per ADS.)

Business Units

As discussed previously the **intelligent lighting** continues to be plagued by the shortage of large panels for some of its customers. As a result some customers cut back orders from O2Micro. Free-dimming products and high power lighting continue to grow and have higher than average margins.
On June 15, 2017 O_2Micro announced that it has signed a licensing agreement with Nanoleaf for non-exclusive use of selected patents related to O_2Micro's Free Dimming technology used in the licensee's light bulb products, however the company is expecting Nanoleaf to convert to using O2Micro products rather than continue to produce products based on this license. The company is still optimistic about the automotive backlighting market the self-driving cars and trucks who will need even larger displays.

Battery management is the company's second largest sector and fastest growing. It continues its excellent growth as the industry increases it use of lithium ion batteries. Examples of end use products are power tools, e-bikes, e-vehicles, and vacuums. E-bike sharing programs are becoming popular through out the world. Newer markets for O2Micro include UPS, solar battery management, and drones.

The market for computer notebook continues to decline. They are unfortunately 90% of the revenues in this 15-20% segment of the company's revenues. Tablets and smartphones, while a small part of this sector, continue to grow and win design ins. Smartphone makers are suffering a shortage of chips which has impeded the roll out of new models.

Figure 1. NANOLEAF BLOOM SELF-DIMMING LED LIGHTBULB



This is the reinforced high-strength LED light bulb that you'll want in every lamp in the home. Set the brightness of your light without installing dimming switches all over the home—it's a simple as flicking a switch! $19.99

FEATURES

- Winner of the 2015 Red Dot Design Award
- Not for standard dimming fixtures
- 30,000 hour lifespan
- 10W / 1,200 Lm (comparable to 75W incandescent)
- 3000K Color Temperature (Warm White)
- Set the brightness with your lamp's power switch

VALUATION

Company Has Significant Upside If It Can End Cash Burn

The company trades at an enterprise value of negative $3.8 million. At the end of Q2 2017, the company had $47.5 million (or $1.82 per ADS) in cash and equivalents, no debt and valuable real estate in China and California. In California it owns a 37,180 square foot building where it has its USA operations, which was bought for $4.6 million in May 2004 and believe it is now worth approximately $7 million. It also owns other real estate in China. It also has long-term investments in other companies. Activists had tried to encourage a transaction with an acquirer but the company has no interest in a sale and due to restrictions it is difficult to force one.

Recently two of the comparable companies we had been using, Intersil and Linear Technology, were acquired. Intersil was acquired by Renesas for $3.2 billion at a valuation of 5.9xs the company's trailing $542.1 million in revenue. Analog Devices acquired linear Technology for $14.8 billion. This is 9.9 times its trailing four quarters of revenue of $1.5 billion.

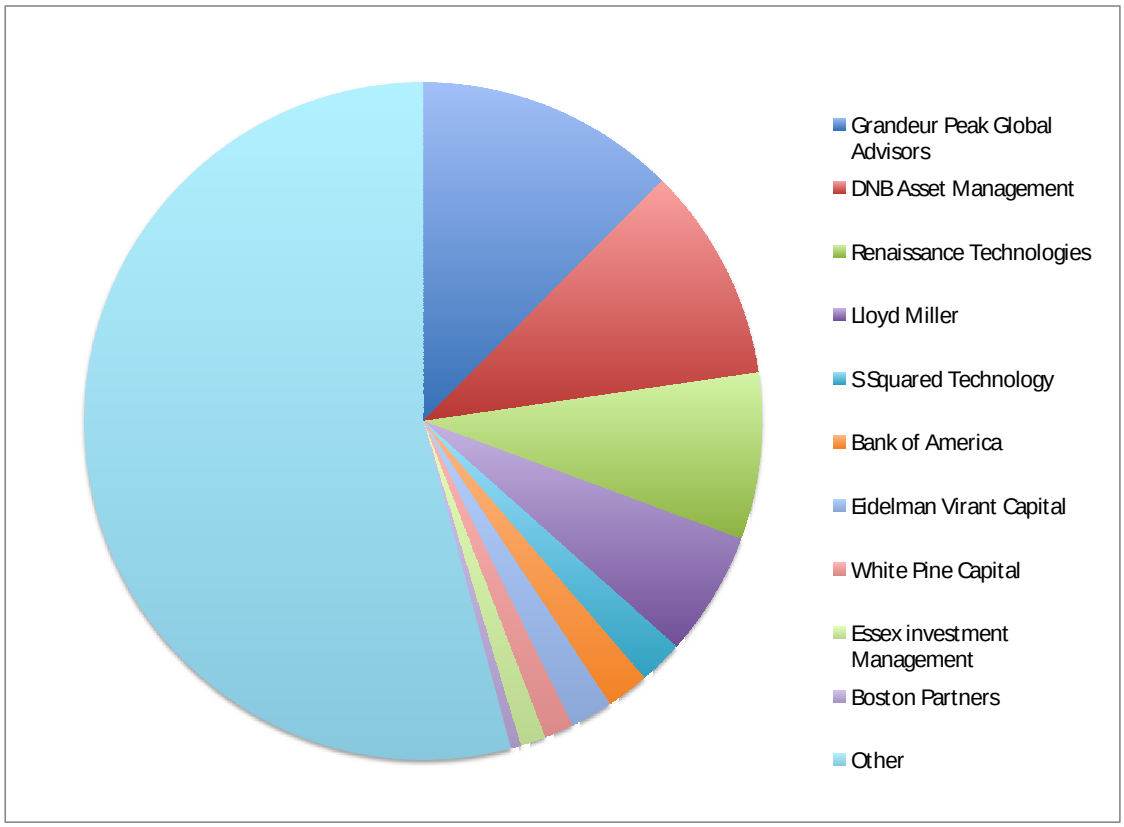
Were we to use the average enterprise value to trailing twelve-month sales of 4.8 times and apply it to OIIM's trailing 12-month $60 million revenues, we would calculate an enterprise value of $288 million. Adding to it $47.5 million in cash gives us a market cap of $335 million or **$12.95 per share**. We believe that once the company shows sustainable revenue growth while continuing to cut losses, the market should

afford it a valuation closer to this price. Based on company guidance, the company should have year over year revenue growth again next quarter, making it five quarters in a row.

	Competitors	EV	TTM Sales	EV/Sales
Microsemi	**MSCC**	7,784	1,790	4.3
Monolithic Power Systems	**MPWR**	3,925	423	9.3
Cree Inc.	**CREE**	1,915	1,500	1.3
Microchip Technology	**MCHP**	21,078	3,410	6.2
Maxim	**MXIM**	11,375	2,300	4.9
Texas Instruments	**TXN**	81,355	14,180	5.7
Cirrus Logic	**CRUS**	3,270	1,540	2.1
	Average			4.8

OWNERSHIP

Updated July 31, 2017



RISKS

- O_2Micro has exposure several stagnant markets such as standard TVs and declining markets such as notebooks and smaller monitors. It is depending on free dimming and high power LED lighting, 4K TVs, battery management, and successful penetration of and volume sales to the smartphone market to give it meaningful revenue and margin growth. At present the high-end TV and smartphone markets have been supply constrained, limiting O2Micro's ability to grow in these markets.

- It may be difficult for the company to capture market share in smartphones and tablets as a new entrant in an established field competing primarily with giant Texas Instruments and other larger firms.

- The firm is currently not at GAAP breakeven, is still cash flow negative, and has only started to grow revenues after years of declines.

- Given its large number of patents, litigation risk is a possibility as the company enforces its patents.

PROJECTED INCOME STATEMENT

	March Q1 15	June Q2 15	Sept Q3 15	Dec Q4 15	March Q1 16	June Q2 16	Sept Q3 16	Dec Q4 16	March Q1 17	June Q2 17E	Sept Q3 17E	Dec Q4 17E	2015	2016	2017E	2018E
REVENUE																
Net Revenue	13.1	14.7	13.7	13.4	13.0	13.2	14.4	15.9	15.0	15.0	16.5	18.0	54.8	56.6	64.5	74.1
Yr-to-yr Gr.	-20%	-16%	-11%	-7%	-1%	-10%	6%	19%	15%	13%	14%	13%	-14%	3%	14%	15%
OPERATING EXPENSES																
Cost of goods sold	6.5	7.4	6.6	6.6	6.6	6.5	6.8	7.3	7.1	7.5	7.5	7.0	27.1	27.3	29.1	32.8
Gross Margin	6.6	7.3	7.1	6.7	6.3	6.7	7.6	8.6	7.9	7.5	9.0	10.0	27.7	29.2	35.4	41.3
% of Sales	50.0%	49.6%	51.0%	50.4%	48.8%	50.7%	52.6%	54.1%	52.7%	50.0%	54.5%	55.6%	50.5%	51.7%	54.9%	55.7%
R&D	4.5	3.8	4.7	4.8	3.8	3.8	4.0	4.1	4.1	4.3	4.4	4.5	17.8	15.6	17.3	19.3
SG&A	5.7	6.3	5.8	5.5	4.9	5.0	4.7	4.9	5.1	5.1	5.1	5.2	23.3	19.5	20.5	23.2
One-time expenses & Adj.	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Tot Operating Exp.	10.1	10.2	10.5	11.4	8.6	8.8	8.7	9.0	9.1	9.4	9.5	9.7	42.3	35.1	37.7	42.5
Operating Income	(3.6)	(2.9)	(3.4)	(4.7)	(2.3)	(2.1)	(1.1)	(0.4)	(1.2)	(1.9)	(0.5)	0.3	(14.6)	(5.9)	(2.4)	(1.2)
Interest income	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7	0.3	0.3	0.3
Foreign exchange loss	0.0	(0.2)	0.8	0.0	(0.2)	(0.3)	0.2	0.4	(0.2)	0.0	0.0	0.0	0.7	0.1	(0.2)	0.0
Gain on sale of real estate	0.3	0.2	0.3	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.8	1.7	0.0	0.0
Other (rent) - net	0.1	0.2	0.1	0.4	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.7	0.9	0.4	1.1
Gain/loss on long term investments	0.0	0.0	0.0	(5.0)	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	(5.0)	0.9	0.0	0.0
Total other Income	0.6	0.4	1.3	(4.4)	0.1	0.4	2.7	0.7	0.0	0.2	0.2	0.2	(2.0)	3.9	0.5	1.4
Pretax Income	(3.0)	(2.5)	(2.1)	(9.1)	(2.2)	(1.7)	1.6	0.4	(1.2)	(1.8)	(0.3)	0.5	(16.6)	(1.9)	(1.8)	0.2
Pretax margin	-22.6%	-16.7%	-15.1%	-68.1%	-16.8%	-13.1%	11.2%	2.2%	-8.3%	-11.7%	-2.1%	2.7%	-30.3%	-3.4%	-2.9%	0.3%
Taxes	0.2	0.3	0.3	3.8	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	4.6	1.1	0.9	0.7
Tax Rate	-8.1%	-11.7%	-13.9%	-10.9%	-9.2%	-13.7%	17.5%	96.6%	-18.0%	-14.3%	-58.7%	41.6%	-28.0%	-54.9%	-47.2%	284.8%
GAAP Net Income	(3.2)	(2.7)	(2.4)	(12.9)	(2.4)	(2.0)	1.3	0.0	(1.5)	(2.0)	(0.5)	0.3	(21.2)	(3.0)	(2.7)	(0.4)
Non-GAAP Net Income	(2.9)	(2.3)	(1.9)	(2.5)	(2.0)	(1.8)	(0.9)	0.4	(1.0)	(1.6)	(0.1)	0.7	(9.7)	(4.4)	(2.1)	1.2
GAAP EPS-Basic	($0.12)	($0.10)	($0.09)	($0.50)	($0.09)	($0.08)	$0.05	$0.00	($0.06)	($0.08)	($0.02)	$0.01	($0.82)	($0.12)	($0.11)	($0.02)
GAAP EPS-Fully dil.	($0.12)	($0.10)	($0.09)	($0.50)	($0.09)	($0.08)	$0.05	$0.00	($0.06)	($0.08)	($0.02)	$0.01	($0.82)	($0.12)	($0.11)	($0.02)
Non-GAAP	**($0.11)**	**($0.09)**	**($0.07)**	**($0.10)**	**($0.08)**	**($0.06)**	**($0.04)**	**$0.01**	**($0.04)**	**($0.06)**	**($0.01)**	**$0.03**	**($0.37)**	**($0.16)**	**($0.08)**	**$0.05**
Share Out	26.5	26.1	25.9	25.6	25.7	25.7	25.6	25.6	25.8	25.7	25.6	25.5	26.0	25.6	25.7	25.0
Fully diluted shares	26.5	26.1	25.9	25.6	25.7	25.7	25.9	26.1	25.8	25.7	25.6	25.5	26.0	25.6	25.7	25.5
Yr-to-yr Gr.	-5%	-5%	-5%	-4%	-3%	-2%	0%	2%	1%	0%	-1%	-2%	-4.5%	-1.5%	0.2%	-0.7%

BALANCE SHEET

	June 30, 2017	March 31, 2017	June-Mar % Change	June 30, 2016	Yr-to-Yr % Change
CURRENT ASSETS					
Cash and cash equivalents	$28,850	$27,372	5.4%	$37,475	-23.0%
Restricted cash	34	34	0.0%	32	6.3%
Short-term investments	18,640	23,124	-19.4%	10,028	85.9%
Accounts receivable, net	8,815	6,862	28.5%	6,880	28.1%
Inventories	10,023	9,577	4.7%	9,216	8.8%
Prepaid expenses and other current assets	1,830	1,384	32.2%	1,464	25.0%
Assets held for sale	0	0	0.0%	1,956	-100.0%
Total current assets	**68,192**	**68,353**	-0.2%	**67,051**	1.7%
LONG-TERM INVESTMENTS	4,245	4,253	-0.2%	4,861	-12.7%
PROPERTY AND EQUIPMENT, NET	14,030	13,963	0.5%	13,904	0.9%
OTHER ASSETS	1,962	2,086	-5.9%	2,231	-12.1%
Total other assets	20,237	20,302	-0.3%	20,996	-3.6%
TOTAL ASSETS	88,429	88,655	-0.3%	88,047	0.4%
CURRENT LIABILITIES					
Notes and accounts payable	4,132	3,444	20.0%	2,746	50.5%
Income tax payable	274	153	79.1%	334	-18.0%
Deferred tax liabilities	0	0	0.0%	1,030	-100.0%
Accrued expenses and other current liabilities	3,495	3,334	4.8%	3,244	7.7%
Total current liabilities	7,901	6,931	14.0%	7,354	7.4%
OTHER LONG-TERM LIABILITIES					
Accrued pension liabilities	291	295	-1.4%	272	7.0%
Deferred tax liabilities	940	987	-4.8%	0	NM
Other liabilities	86	86	0.0%	122	-29.5%
Total long-term liabilities	1,317	1,368	-3.7%	394	234.3%
Total liabilities	9,218	8,299	11.1%	7,748	19.0%
SHAREHOLDERS EQUITY					
Ordinary shares	33	33	0.0%	33	0.0%
Additional paid-in capital	142,253	141,937	0.2%	142,038	0.2%
Retained earnings (accumulated deficits)	(44,263)	(42,829)	3.3%	(42,716)	3.6%
Accumulated other comprehensive income	5,209	5,136	1.4%	5,928	-12.1%
Treasury stock	(24,021)	(23,921)	0.4%	(24,984)	-3.9%
Total shareholders equity	79,211	80,356	-1.4%	80,299	-1.4%
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	88,429	88,655	-0.3%	88,047	0.4%
Cash and equivalents	$47,490	$50,496	-6.0%	$47,503	0.0%
Change in cash and equivalents	(3,006)	(2,368)	26.9%	$999	-400.9%
Market value	50,693,440	64,600,000	-21.5%	43,644,100	16.2%
Enterprise value	3,169,440	14,070,000	-77.5%	(3,890,900)	-181.5%
DSO	49	42	16.7%	42	16.7%
Inventory Days	124	120	3.3%	128	-3.1%

ANNUAL CASH FLOW

	12 Months Ended December 31,			
	2016	2015	2014	2013
OPERATING ACTIVITIES				
Net loss	$ (2,986)	$ (21,095)	$ (15,057)	$ (19,099)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	1,682	2,446	3,718	4,685
Stock-based compensation	1,606	1,912	2,120	2,609
Loss on asset write-off	0	0	82	
Inventory write-downs	1,527	913	1,538	900
Gain on sale of long-term investments	(948)	(8)	(436)	
Impairment loss on long-term investments	0	4,953	83	
Gain on disposal of property and equipment, net	(1,726)	(738)	(428)	(106)
Deferred income taxes	(1,231)	1,989	78	41
Other, net			(36)	(1)
Changes in operating assets and liabilities:				
Accounts receivable, net	(2,008)	1,592	3,235	(1,251)
Inventories	(1,140)	(1,933)	(2,963)	(200)
Prepaid expenses and other current assets	(6)	191	130	510
Deferred charges	(375)	(416)	(985)	(1,366)
Notes and accounts payable	996	1,202	(2,038)	413
Income tax payable	(2,065)	1,595	412	(124)
Accrued expenses and other current liabilities	(1,064)	(1,039)	577	(1,083)
Accrued pension liabilities	(4)	(11)	(12)	(25)
Other liabilities	(56)	(168)	(346)	(8,893)
Net cash used in operating activities	(7,798)	(8,615)	(10,328)	(22,990)
Acquisition of:				
Short-term investments	(28,797)	(7,128)	(22,346)	(15,496)
Long-term investments	0			(250)
Property and equipment	(673)	(724)	(1,004)	(743)
Decrease (increase) in:				
Restricted assets				10,000
Restricted cash	0	132	(1)	1
Other assets	40	82	116	108
Proceeds from:				
Sale of short-term investments	18,331	16,755	34,333	52,131
Sale of long-term investments	5,999	537	1,304	
Disposal of property and equipment	3,837	3,205	1,982	166
Net cash provided by investing activities	(1,263)	12,859	14,384	45,917
FINANCING ACTIVITIES				
Acquisition of treasury stock	(619)	(3,233)	(4,965)	(8,279)
Proceeds from:				
Exercise of stock options	2	31	44	25
Issuance of ordinary shares under the Employee Stock Purchase Plan	73	180	258	335
Net cash used in financing activities	(544)	(3,022)	(4,663)	(7,919)
EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATE	(262)	(1,092)	(617)	(613)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(9,867)	130	(1,224)	14,395
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	41,199	41,069	42,293	27,898
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	31,332	41,199	41,069	42,293
SUPPLEMENTAL DISCLOSURES OF CASH FLOWS				
Cash paid for tax	$ 4,349	$ 1,068	$ 697	$ 1,064
Cash Flow	(2,076)	(9,628)	(8,420)	(10,971)
Free cash flow	(2,749)	(10,352)	(9,424)	(11,714)

HISTORICAL STOCK PRICE



DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, Lisa Thompson, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.

Zacks SCR has received compensation from the issuer directly or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business.
SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover.
SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.