

Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

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

scr.zacks.com

10 S. Riverside Plaza, Chicago, IL 60606

O2Micro International Ltd (OIIM-NASDAQ)

OIIM: Sales to TV and Smartphone Customers Expected to Ramp in Second Half

Using an industry average value to trailing 12-month sales of 5.6 times and OIIM's \$60.2 m trailing 12-month revenue, we would calculate an enterprise value of \$336, a market cap of \$382 m and a price of **\$14.90 per share**, if the company could reach breakeven.

OUTLOOK

O₂Micro 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 and smartphones. It had had declining revenues, but has reported revenue growth in the two years. It has struggled to reach profitability and cash flow breakeven. The company trades at a negative enterprise value of \$3.7 million, below the value of its non-cash assets.

Current Price (01/31/18) \$1.65
Valuation **\$14.90**

SUMMARY DATA

52-Week High **\$2.55**
52-Week Low **\$1.48**
One-Year Return (%) **-29.8**
Beta **0.07**
Average Daily Volume (sh) **21,374**

Shares Outstanding (mil) **25.7**
Market Capitalization (\$mil) **\$42**
Short Interest Ratio (days) **N/A**
Institutional Ownership (%) **40**
Insider Ownership (%) **8**

Annual Cash Dividend **\$0.00**
Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates
Sales (%) **-9.1**
Earnings Per Share (%) **N/A**
Dividend (%) **N/A**

P/E using TTM EPS **N/A**
P/E using 2018 Estimate **-9.9**
P/E using 2019 Estimate **82.5**

Zacks Rank **N/A**

Risk Level **Above Average**
Type of Stock **Small-Value**
Industry **Elec Comp-Semis**
Zacks Rank in Industry **N/A**

ZACKS ESTIMATES

Revenue

(in millions of \$)

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
2016	13.0 A	13.2 A	14.4 A	15.9 A	57 A
2017	15.0 A	14.5 A	15.5 A	15.2 A	60 A
2018	14.2 E	15.5 E	16.5 E	17.5 E	64 E
2019					70 E

Earnings Per Share

(non-GAAP EPS before non-recurring items)

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
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 A	-\$0.06 A	-\$0.18 A
2018	-\$0.08 E	-\$0.05 E	-\$0.03 E	-\$0.00 E	-\$0.16 E
2019					-\$0.03 E

Zacks Projected EPS Growth Rate - Next 5 Years % **8**

WHAT'S NEW

Sales to TV and Smartphone Customers Expected to Ramp in Second Half

O2Micro reported Q4 2017 revenues of \$15.2 million, within the range of guidance but slightly below the midpoint. This was down 4% from last year and broke the company's string of five straight quarters of revenue growth. Guidance for revenue for the first quarter of 2018 is sequentially down 2-8% in keeping with its normal seasonality. The midpoint in revenue guidance would be down 5% from a year ago. The company expects an accelerating second half as sales to Chinese smartphone and TV makers ramp. In smartphones, volumes will leap as the company's second-generation product for fast charging will become available. To date TV makers have seen increased panel availability but have been hurt by a silicon shortage restricting production, however this shortage should lessen by then. After a decline in LCD TV sales in 2017 of 4%, WitsView expects units to increase in 2018 by 3.9% to 218 million units. In addition, global sales of TVs over 75 inches should grow from 1.15 million units in 2016 to 3.3 million in 2020 according to IHS Market. Both of these forecasts point to better sales for O2Micro after a lackluster market in 2017.

The company continues to project cash breakeven at \$15.5 - 17 million in quarterly revenues and profitability at \$17-19 million. Expenses in Q1 2018 should be similar to Q4 2017 and with lowered revenues in Q1 we expect losses will be up sequentially.

Gross margin was 50.5%, up sequentially (from 50.3%) but down year over year (from 54.1%) after an abnormally strong Q4 in 2016.

Operating expenses in the quarter were \$9.4 million versus \$9.0 million last year and \$9.5 million in Q3 2017.

Operating losses increased to \$1.8 million in 2017 from \$0.4 million, clearly going in the wrong direction and even up sequentially as revenues declined.

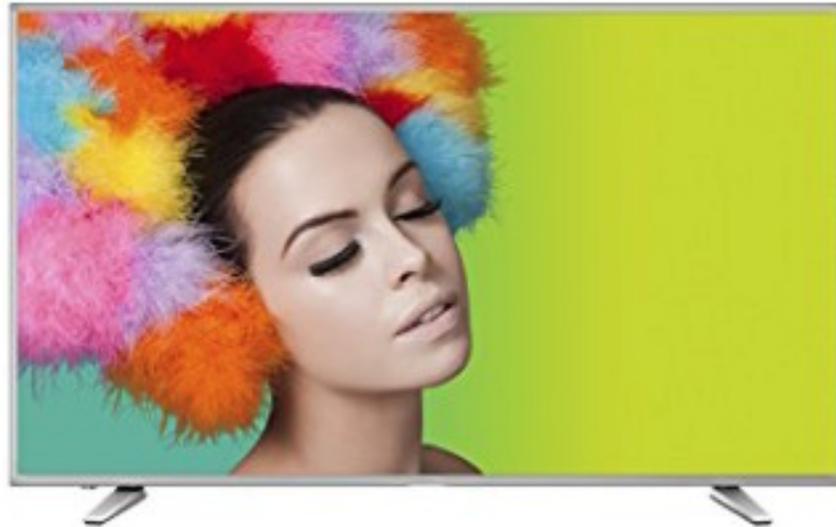
Non-GAAP net income was a loss of \$1.5 million versus a gain of \$385,000 last year, but last year included a currency gain of \$367,000. The company reported non-GAAP EPS loss of \$0.06 versus a gain of \$0.01 last year.

At December 31, 2017, the company had \$46.1 million in cash and equivalents (or \$1.80 per ADS.) The company expects to be cash flow breakeven in the second half of this year, but not for the full year.

Business Units

Intelligent lighting continued to improve as the shortage of large panels for televisions ended, but silicon shortages continued to impact production of television sets. This should be alleviated in the second half. Typically 60% of revenues from televisions come in the second half of a calendar year. The market for televisions continues to improve, especially at the high end where manufacturers make all their money. Vendors continue to seek out differentiation at the high end adding to higher ASPs for O2Micro. Sharp has recently become an important brand for OIIM. Two years ago the company did no business with it, but Chinese manufacturer Hon Hai/Foxconn purchased the Sharp brand and they have since become an O2Micro customer. Sharp is in a land grab to revitalize its brand and take market share and O2 is benefitting from its efforts.

Fig. 1 - Sharp 65" Class 4K HDR Smart TV - LC-65P620U



Power Products will ramp in the second half as volumes increase to smartphone manufacturers. In particular the company expects a leap in sales once its second-generation products are available. It is looking for good sales of its fast charging IC as well as on-the-go and gas gage products as previous design ins ramp production.

Battery management is the company's second largest sector and fastest growing. It has been growing 30% per year and as it becomes a larger percent of revenues, the math points to accelerating growth. It is currently 20-25% of total revenues. The industry continues to move to lithium ion batteries. This business is historically seasonal in the second half of the year but the increasing ebike business is somewhat evening out sales. Examples of end use products are power tools, e-bikes, e-vehicles, and vacuums and most recently drones. New generations of tools will allow OIIM to sell higher-end product at higher cost to this market as its chips do more for customers.

VALUATION

Company Has Significant Upside If It Can End Cash Burn

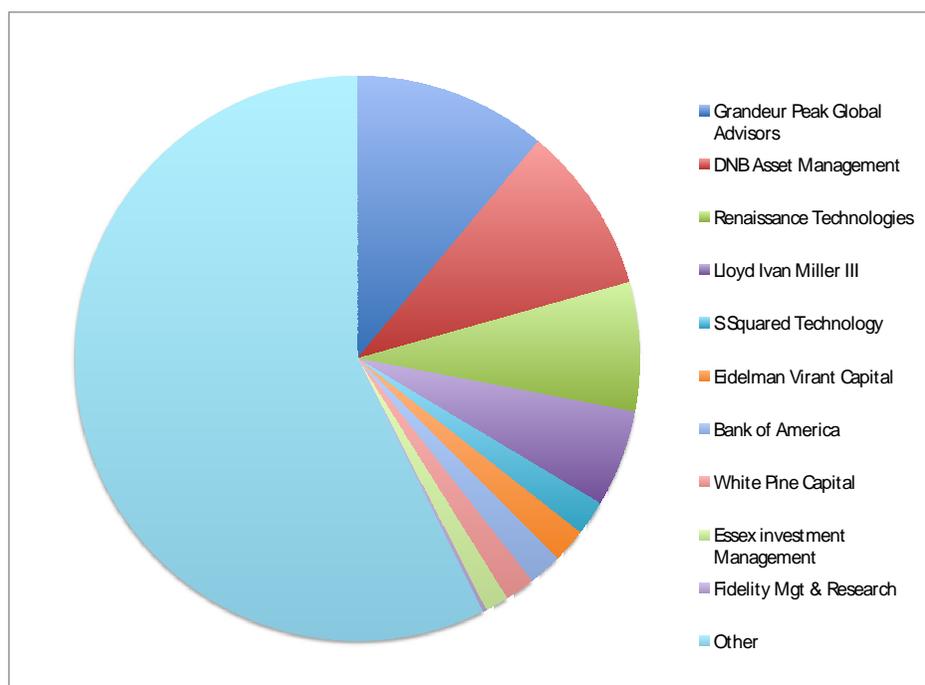
The company trades at a negative enterprise value of \$3.7 million. Last year the company looked as if it had turned the corner and was approaching profitability but panel shortages for TVs nixed that progress and the valuation of the company slipped again. At the end of Q4 2017, the company had \$46.1 million (or \$1.80 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.

Two of the comparable companies we had been using, Intersil and Linear Technology, were acquired at very high valuations. 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 5.6 times and apply it to OIIM's trailing 12-month \$60.2 million revenues, we would calculate an enterprise value of \$336 million. Adding to it \$46.1 million in cash gives us a market cap of \$382 million or **\$14.90 per share**. We believe that once the company shows sustainable revenue growth and cash breakeven, the market should afford it a valuation closer to this price. Next quarter the company expects revenues to be down year over year versus an exceptionally strong Q1 2017. We expect cash flow breakeven in Q3 or Q4.

	Competitors	EV	TTM Sales	EV/Sales
Microsemi	MSCC	7,880	1,790	4.4
Monolithic Power Systems	MPWR	4,760	423	11.3
Cree Inc.	CREE	3,010	1,460	2.1
Microchip Technology	MCHP	23,920	3,580	6.7
Maxim	MXIM	13,510	2,300	5.9
Texas Instruments	TXN	95,700	14,180	6.7
Cirrus Logic	CRUS	3,420	1,600	2.1
	Average			5.6

OWNERSHIP



RISKS

- O₂Micro 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 stabilize revenues after years of declines.
- Given its large number of patents, litigation risk is a possibility as the company enforces its patents.

INCOME STATEMENT

	March Q1 16	June Q2 16	Sept Q3 16	Dec Q4 16	March Q1 17	June Q2 17	Sept Q3 17	Dec Q4 17	March Q1 18E	June Q2 18E	Sept Q3 18E	Dec Q4 18E	2016	2017	2018E	2019E
REVENUE																
Net Revenue	13.0	13.2*	14.4*	15.9*	15.0*	14.5*	15.5	15.2*	14.2*	15.5	16.5	17.5	56.6	60.2	63.7	70.0
Yr-to-yr Gr.	-1%	-10%	6%	19%	15%	10%	7%	-4%	-5%	7%	6%	15%	3%	6%	6%	10%
OPERATING EXPENSES																
Cost of goods sold	6.6	6.5	6.8	7.3	7.1	7.1	7.7	7.5	7.1	7.7	7.8	8.0	27.3	29.4	30.6	33.0
Gross Margin	6.3	6.7	7.6	8.6	7.9	7.4	7.8	7.7	7.1	7.9	8.7	9.5	29.2	30.8	33.2	37.0
% of Sales	48.8%	50.7%	52.6%	54.1%	52.7%	50.9%	50.3%	50.5%	50.0%	50.6%	52.7%	54.3%	51.7%	51.1%	52.0%	52.9%
R&D	3.8	3.8	4.0	4.1	4.1	4.5	4.7	4.8	4.8	4.8	4.8	4.8	15.6	18.0	19.2	19.1
SG&A	4.9	5.0	4.7	4.9	5.1	4.4	4.9	4.7	4.8	4.8	4.9	5.0	19.5	19.0	19.5	20.0
One-time expenses & Adj.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
Tot Operating Exp.	8.6	8.8	8.7	9.0	9.1	8.9	9.5	9.4	9.6	9.6	9.7	9.8	35.1	37.0	38.7	39.1
Operating Income	(2.3)	(2.1)	(1.1)	(0.4)	(1.2)	(1.6)	(1.7)	(1.8)	(2.5)	(1.8)	(1.0)	(0.3)	(5.9)	(6.2)	(5.5)	(2.1)
Interest income	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
Foreign exchange loss	(0.2)	(0.303)	0.2	0.4	(0.2)	0.1	0.3	(0.0)	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0
Gain on sale of real estate	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
Other (rent) - net	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.9	0.7	0.8	0.8
Gain/loss on long term investments	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total other Income	0.1	0.4	2.7	0.7	0.0	0.4	0.6	0.2	0.2	0.3	0.2	0.2	3.9	1.1	1.0	0.8
Pretax Income	(2.2)	(1.7)	1.6	0.4	(1.2)	(1.2)	(1.1)	(1.6)	(2.3)	(1.4)	(0.8)	(0.1)	(1.9)	(5.1)	(4.6)	(1.3)
Pretax margin	-16.8%	-13.1%	11.2%	2.2%	-8.3%	-8.3%	-7.4%	-10.2%	-16.2%	-9.2%	-4.8%	-0.4%	-3.4%	-8.5%	-7.2%	-1.8%
Taxes	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	1.1	1.0	1.2	1.2
Tax Rate	-9.2%	-13.7%	17.5%	96.6%	-18.0%	-19.1%	-20.0%	-21.2%	-10.9%	-21.1%	-38.0%	-473.9%	-54.9%	-19.7%	-25.2%	-95.8%
GAAP Net Income	(2.4)	(2.0)	1.3	0.0	(1.5)	(1.4)	(1.4)	(1.9)	(2.5)	(1.7)	(1.1)	(0.4)	(3.0)	(6.1)	(5.7)	(2.5)
Non-GAAP Net Income	(2.0)	(1.8)	(0.938)	0.4	(1.0)	(1.1)	(0.985)	(1.5)	(2.1)	(1.3)	(0.7)	0.1	(4.4)	(4.6)	(4.0)	(0.9)
GAAP EPS-Basic	(\$0.09)	(\$0.08)	\$0.05	\$0.00	(\$0.06)	(\$0.06)	(\$0.05)	(\$0.07)	(\$0.10)	(\$0.07)	(\$0.04)	(\$0.01)	(\$0.12)	(\$0.24)	(\$0.22)	(\$0.10)
GAAP EPS-Fully dil.	(\$0.09)	(\$0.08)	\$0.05	\$0.00	(\$0.06)	(\$0.06)	(\$0.05)	(\$0.07)	(\$0.10)	(\$0.07)	(\$0.04)	(\$0.01)	(\$0.12)	(\$0.24)	(\$0.22)	(\$0.10)
Non-GAAP	(\$0.08)	(\$0.06)	(\$0.04)	\$0.01	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.06)	(\$0.08)	(\$0.05)	(\$0.03)	\$0.00	(\$0.16)	(\$0.18)	(\$0.16)	(\$0.03)

BALANCE SHEET

	Dec 31, 2017	Sept 30, 2017	Dec-Sept % Change	Dec 31, 2016	Yr-to-Yr % Change
CURRENT ASSETS					
Cash and cash equivalents	\$28,520	\$25,176	13.3%	\$31,332	-9.0%
Restricted cash	35	34	2.9%	32	9.4%
Short-term investments	17,601	21,000	-16.2%	21,532	-18.3%
Accounts receivable, net	9,184	8,966	2.4%	7,205	27.5%
Inventories	9,330	10,539	-11.5%	9,275	0.6%
Prepaid expenses and other current assets	1,245	1,382	-9.9%	1,106	12.6%
Total current assets	65,915	67,097	-1.8%	70,482	-6.5%
LONG-TERM INVESTMENTS					
LONG-TERM INVESTMENTS	3,112	4,245	-26.7%	4,253	-26.8%
PROPERTY AND EQUIPMENT, NET	13,755	13,880	-0.9%	13,736	0.1%
OTHER ASSETS					
Total other assets	19,167	20,677	-7.3%	20,207	-5.1%
TOTAL ASSETS	85,082	87,774	-3.1%	90,689	-6.2%
CURRENT LIABILITIES					
Notes and accounts payable	2,460	4,031	-39.0%	4,329	-43.2%
Income tax payable	341	371	-8.1%	180	89.4%
Deferred tax liabilities	0	0	0.0%	0	0.0%
Accrued expenses and other current liabilities	4,379	4,346	0.8%	4,102	6.8%
Total current liabilities	7,180	8,748	-17.9%	8,611	-16.6%
OTHER LONG-TERM LIABILITIES					
Accrued pension liabilities	355	289	22.8%	281	26.3%
Deferred tax liabilities	906	826	9.7%	0	NM
Other liabilities	86	86	0.0%	1,013	-91.5%
Total long-term liabilities	1,347	1,201	12.2%	1,294	4.1%
Total liabilities	8,527	9,949	-14.3%	9,905	-13.9%
SHAREHOLDERS EQUITY					
Ordinary shares	33	33	0.0%	33	0.0%
Additional paid-in capital	142,946	142,621	0.2%	142,738	0.1%
Retained earnings (accumulated deficits)	(47,517)	(45,638)	4.1%	(41,372)	14.9%
Accumulated other comprehensive income	5,337	5,081	5.0%	4,415	20.9%
Treasury stock	(24,244)	(24,272)	-0.1%	(25,030)	-3.1%
Total shareholders equity	76,555	77,825	-1.6%	80,784	-5.2%
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	85,082	87,774	-3.1%	90,689	-6.2%
Cash and equivalents	\$46,121	\$46,176	-0.1%	\$52,864	-12.8%
Change in cash and equivalents	(55)	(1,314)	-95.8%	(204)	-73.0%
Market value	42,434,700	51,436,000	-17.5%	67,730,000	-37.3%
Enterprise value	(3,721,300)	5,226,000	-171.2%	14,834,000	-125.1%
DSO	54	52	3.8%	39	38.5%
Inventory Days	119	120	-0.8%	110	8.2%

ANNUAL CASH FLOW

(2017 Not Yet Available)

	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 & equipment, net	(1,726)	(738)	(428)	(106)
Deferred income taxes	(1,231)	1,989	78	41
Other, net	0	0	(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	0
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.