Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

July 26, 2023
Lisa Thompson
312-265-9154 / lthompson@zacks.com

scr.zacks.com
10 S. Riverside Plaza, Suite 1600, Chicago, IL 60606

Tower Semiconductor (NASDAQ: TSEM)

TSEM: All Eyes are on the August 15th Deal Date

We believe that the stock will appreciate to the acquisition price as the risk discount and time value of money versus the acquisition price dissipates. The deal is expected to close as soon as it gets regulatory approval.

Current Price (7/26/2023)	$34.78
Valuation	**$53.00**

OUTLOOK

Tower Semiconductor has accepted an offer to be acquired by Intel in an all-cash deal at $53 per share. The deal is still awaiting permission from China. Tower is a pure-play analog semiconductor wafer foundry that manufactures SiGe, MEMS, RF, embedded flash-based memory, analog/mixed-signal, and CMOS image-sensor devices in the US, Israel, and Japan. It is serving markets in mobile such as RF High Position analog, as well as in CMOS image sensors, and power management. It also added a new fab in Italy in partnership with STMicro.

SUMMARY DATA

52-Week High	**47.86**
52-Week Low	**34.78**
One-Year Return (%)	**-24.3**
Beta	**0.9**
Average Daily Volume (sh)	**833,810**
Shares Outstanding (mil)	**110.0**
Market Capitalization ($mil)	**$3,826**
Short Interest Ratio (days)	**1.8**
Institutional Ownership (%)	**56**
Insider Ownership (%)	**1**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**6.2**
Earnings Per Share (%)	**7.3**
Dividend (%)	**N/A**
P/E using TTM EPS	**13.7**
P/E using 2023 Estimate	**15.3**
P/E using 2024 Estimate	**N/A**

Risk Level	**Below Average**
Type of Stock	**Large Blend**
Industry	**Elec Comp-Semis**

ZACKS ESTIMATES

Revenue
(In millions of US$)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2021	$347 A	$362 A	$387 A	$393 A	$1,508 A
2022	$421 A	$426 A	$427 A	$403 A	$1,668 A
2023	$356 A	$357 A	$361 E	$361 E	$1,435 E
2024					

Earnings per Share
(non-GAAP)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2021	$0.31 A	$0.34 A	$0.41 A	$0.55 A	$1.61 A
2022	$0.55 A	$0.58 A	$0.72 A	$0.69 A	$2.52 A
2023	$0.60 A	$0.52 A	$0.52 E	$0.52 E	$2.28 E
2024					

© Copyright 2023, Zacks Investment Research. All Rights Reserved.

WHAT'S NEW

Investors Still Await Acquisition Approval

Tower Semiconductor reported Q2 earnings and gave no update on the acquisition by Intel. We know the agreement is in place through August 15th at which point the two companies can: 1) extend the agreement as is 2) renegotiate the agreement or 3) terminate the agreement. If it is terminated, Tower will receive $353 million in cash from Intel. At its current price, we see little downside if any if the deal is terminated.

Q2 2023 Revenue Moves Up Sequentially and Should Hold Steady Throughout the Year

Revenues in Q2 2023 were $357 versus $356 million in Q1 2023 and were down 16% year over year—the same as in Q1. Year-over-year revenues were impacted by the shutdown of the Aral manufacturing factory in Japan as of July 1, 2022. We estimate that again this quarter Tower had $20 million less from the Japanese fab than in last year's quarter. The company is no longer providing guidance or hosting earnings calls. Revenues declined sequentially as expected due to the softness in demand from customers across the board, but we believe demand is holding steady. Despite the article by Reuters, the company has not commented about sales to the automotive business since the end of 2021 and we expect it is still a small but growing part of overall revenues.

Q2 2023 gross margin decreased to 24.2% from 26.4% a year ago, and down from 30.9% in higher revenue Q4 2022. Gross margin dollars decreased by $26 million, or 23%. Not including one-time gains, operating expenses decreased by $4.9 million. This year there was a small one-time restructuring gain of $851,000 from the sale of unneeded tools and equipment. Without the gain, the operating margin improved to 16.2% from 15.0% last year. Other income was $7 million compared to an expense of $2.1 million a year ago. No doubt higher interest rates and lower debt is helping Tower with its large cash balance.

With the one-time gain, pretax profit was $53.6 million versus $62.5 million a year ago. Taxes were $5.7 million in the quarter compared to $4.3 million last year.

GAAP net income was $48.7 million versus $58.1 million last year, while non-GAAP net income was an estimated $57.9 million versus $64.1 million a year ago.

Diluted GAAP EPS was $0.46 per share versus $0.58 last year. Adjusted non-GAAP diluted EPS decreased to an estimated $0.52 versus $0.58 a year ago. Average diluted shares for the quarter were 111.2 million, up from 110.6 million last year. EBITDA for the fourth quarter of 2022 was $112.2 million compared to $137.6 million a year ago and down sequentially from $120.7 million in Q1 2023.

Quarterly revenues could be flat for the rest of the year given current demand. We believe Tower is still outperforming the overall market. We are adjusting our 2023 non-GAAP EPS estimate to $2.28.

Balance Sheet

On June 30th, the company had cash, short-term deposits, and marketable securities of $914 million compared to $856 million last quarter. Debt decreased by $24 million to $220 million from last quarter. Its quick ratio increased to 3.7xs and it has $1.1 billion in working capital. Operating cash flow declined sequentially as well as year over year to $115 million. Free cash flow was $26 million after spending $89 million on cap ex in the quarter, net of machinery and equipment sales from the Arai fab.

Recap of Tower Acquisition by Intel

On February 15, 2022, Intel announced plans to buy Tower Semiconductor for $53 per share in cash. The deal is proceeding and we believe it is only awaiting regulatory approval from China. The original agreement is **still in place through August 15th** (the outside date). We have copied part of the conditions for termination below:

Section 8.1 Termination. This Agreement may be terminated and the Merger and the other Transactions may be abandoned (except as otherwise provided below, whether before or after receipt of the Company Shareholder Approval) as follows:

(a) by mutual written consent of Parent and the Company;

(b) by either the Company or Parent, at any time prior to the Effective Time, **if a Governmental Authority of competent jurisdiction shall have issued a final and non-appealable Adverse Law or Order that remains in effect and that permanently restrains, permanently enjoins or otherwise permanently prohibits the consummation of the Merger**; provided, however, that the right to terminate this Agreement under this Section 8.1(b) will not be available to any Party where material failure to fulfill any obligation under this Agreement has been the principal cause of or resulted in, such Adverse Law or Order;

According to the merger document, Tower will be paid a termination fee of **$353 million** if the deal is called off due to regulatory denial.

Parent Termination Fee.
(i) If this Agreement is terminated (A) pursuant to Section 8.1(b) due to an Adverse Law or Order related to any Antitrust Laws or (B) pursuant to Section 8.1(e), and in the case of clause (B) of this Section 8.2(c)(i), on the date of such termination, all conditions to this Agreement are satisfied (other than those conditions that by their terms are to be satisfied at the Closing, each of which is capable of being satisfied at the Closing), or waived (where permissible pursuant to applicable Law), other than the conditions set forth in Section 7.1(b) (solely in connection with an Adverse Law or Order related to the Antitrust Laws) or Section 7.1(c) (solely in connection with outstanding Required Clearances related to the Antitrust Laws (and not FDI Laws)), and the Company is not then in material breach of any provision of this Agreement where such breach by the Company is the primary cause of the failure of any condition to this Agreement being satisfied, then the Parent shall promptly pay, or cause to be paid, to the Company (x) if such termination was by Parent, prior to or substantially concurrently with, and as a condition to, such termination, or (y) if such termination was by the Company, within two (2) Business Days of such termination, an amount in cash equal to **$353,000,000."**

Using its fully diluted share count the purchase offer equals an enterprise value of $5.2 billion. This is 3.4 times Tower's revenues for 2021. The deal is expected to be accretive to Intel upon close. This acquisition will aid Intel's foundry strategy and give it the capacity and expertise to pursue its expansion plans, particularly in the US where Tower already has fabs in California and Texas. With Intel's cash, it can expand its fabs with far greater ease and speed and provide the demand to fill them. Incremental revenues carry margins over 50%. Licensing arrangements with the Japanese fabs were structured to reduce taxes and increase overall profitability at the expense of gross margins. The deal is expected to close as the companies get regulatory approvals from various countries. We believe all the countries have approved the deal so far except China.

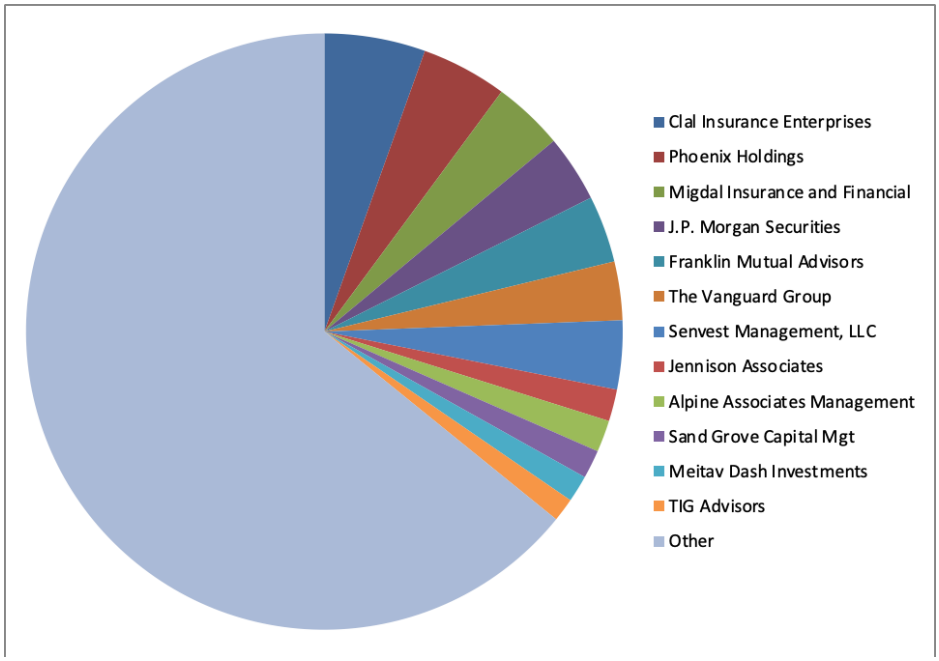
In 2022, the "Creating Helpful Incentives for the Production of Semiconductors for America Act" more commonly known as the CHIPS Act was passed. The bill allocates $52 billion in subsidies to the American semiconductor industry. We expect Intel to be a beneficiary of these subsidies and in the past Tower expressed hope that it could receive funds to expand its San Antonio campus capacity where it has ample space. Applications for funding under this act started to be taken in June.

VALUATION

TSEM trades at an enterprise value of $3.2 billion, or 2.2 times EV to estimated sales for 2023 versus its peers who trade at 4.4 times. If the deal does not go through it will collect another $353 million bringing its enterprise value down to $2.8 billion. At 4.4x sales Tower's market cap would be $7.4 billion or $67 per share.

Foundry Companies	Ticker	EPS 23E	EPS 24E	Price	PE 2023E	PE 2024E	Growth Rate	Sales 2023E	EV/Sales	EV
Company										
Taiwan Semiconductor	TSM	5.08	6.27	98.25	19.3	15.7	23.4%	69.43	7.00	486.3
United Microelectronics	UMC	0.69	0.71	7.25	10.5	10.2	2.9%	7.39	1.87	13.8
Average					14.9	12.9			4.4	

OWNERSHIP



INCOME STATEMENT

	March Q1 22	June Q2 22	Sept Q3 22	Dec Q4 22	March Q1 23	June Q2 23	Sept Q3 23E	Dec Q4 23E	2021	2022	2023E
REVENUE	421.1	426.2	427.1	403.2	355.6	357.2	360.8	361.0	1,508.2	1,677.6	1,434.6
Yr-to-yr Gr.	21%	18%	10%	-2%	-16%	-16%	-16%	-10%		11%	-14%
OPERATING EXPENSES											
Cost of goods sold	316.5	313.7	302.6	278.5	259.9	270.7	272.3	268.9	1,179.0	1,211.3	1,071.8
Gross Margin	104.6	112.4	124.5	124.7	95.7	86.5	88.5	92.1	329.1	466.3	362.8
% of Sales	24.8%	26.4%	29.2%	30.9%	26.9%	24.2%	24.5%	25.5%	21.8%	27.8%	25.3%
R&D	20.3	20.5	22.4	20.7	19.3	19.5	20.2	20.8	85.4	83.9	79.8
M, G&A	21.3	21.3	18.9	18.9	18.6	17.4	18.0	18.5	77.2	80.3	72.5
One-time charges	0.0	0.0	4.0	(13.6)	(31.7)	(0.9)	0.0	0.0	0.0	(9.6)	(32.5)
Tot Operating Exp.	41.6	41.8	45.3	26.0	6.3	36.0	38.2	39.3	162.6	154.6	119.8
Operating Income	63.1	70.7	79.2	98.7	89.4	50.5	50.3	52.8	166.5	311.7	243.0
Operating Margin	15.0%	16.6%	18.5%	24.5%	25.1%	14.1%	13.9%	14.6%	11%	19%	17%
Yr-to-yr Gr.	94%	108%	79%	77%	42%	-29%	-37%	-47%		68%	-9%
Interest & other non-cash financing	(2.1)	(8.2)	(9.4)	(0.1)	7.0	3.9	2.0	0.0	(11.4)	(19.7)	12.9
Other income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gain from acqusiition	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit before tax	60.9	62.5	69.9	98.7	96.4	54.5	52.3	52.8	155.1	292.0	255.9
Profit margin	14.5%	14.7%	16.4%	24.5%	27.1%	15.2%	14.5%	14.6%	10.3%	17.4%	17.8%
Taxes	(5.2)	(4.3)	(3.2)	(12.8)	(15.0)	(5.7)	(4.7)	(4.7)	(1.0)	(25.5)	(30.2)
Tax Rate	8.5%	6.9%	4.5%	13.0%	15.6%	10.6%	9.0%	9.0%	0.7%	8.7%	11.8%
Profit before non-controlling	55.8	58.2	66.7	85.8	81.4	48.7	47.6	48.0	154.1	266.5	225.7
Minority Income	(1.7)	(0.1)	2.5	(2.5)	(10.0)	2.5	2.5	2.5	(4.1)	(1.9)	(2.5)
GAAP Net income	54.0	58.1	69.1	83.3	71.4	51.2	50.1	50.5	150.0	264.6	223.1
Yr-to-yr Gr.	91%	88%	77%	61%	32%	-12%	-28%	-39%		76%	-16%
Non-GAAP Net Income	60.3	64.1	80.2	76.7	62.0	57.9	57.6	58.0	177.15	279.23	253.24
GAAP primary EPS	$0.50	$0.53	$0.63	$0.76	$0.65	$0.47	$0.45	$0.46	$1.39	$2.42	$2.02
Fully diluted GAAP	$0.49	$0.53	$0.62	$0.75	$0.64	$0.46	$0.45	$0.45	$1.37	$2.39	$2.01
Adj Non-GAAP EPS-Fully dil.	**$0.55**	**$0.58**	**$0.72**	**$0.69**	**$0.60**	**$0.52**	**$0.52**	**$0.52**	**$1.61**	**$2.52**	**$2.28**
Yr-to-yr Gr.	78%	70%	76%	25%	10%	-10%	-28%	-25%		56%	-10%
Primary Share Out	108.9	109.1	109.4	109.9	110.0	110.0	110.3	110.6	108.3	109.3	110.2
Fully Diluted GAAP	110.5	110.6	110.8	110.9	111.1	111.2	111.2	111.2	109.8	110.8	111.2
EBITDA	**133.6**	**137.6**	**157.6**	**161.5**	**120.7**	**119.2**	**119.8**	**122.3**	**436.5**	**590.4**	**482.0**
EBITDA Margin	32%	32%	37%	40%	34%	33%	33%	34%	29%	35%	34%
Yr-to-yr Gr.	41%	39%	39%	24%	-10%	-13%	-24%	-24%		22%	-18%

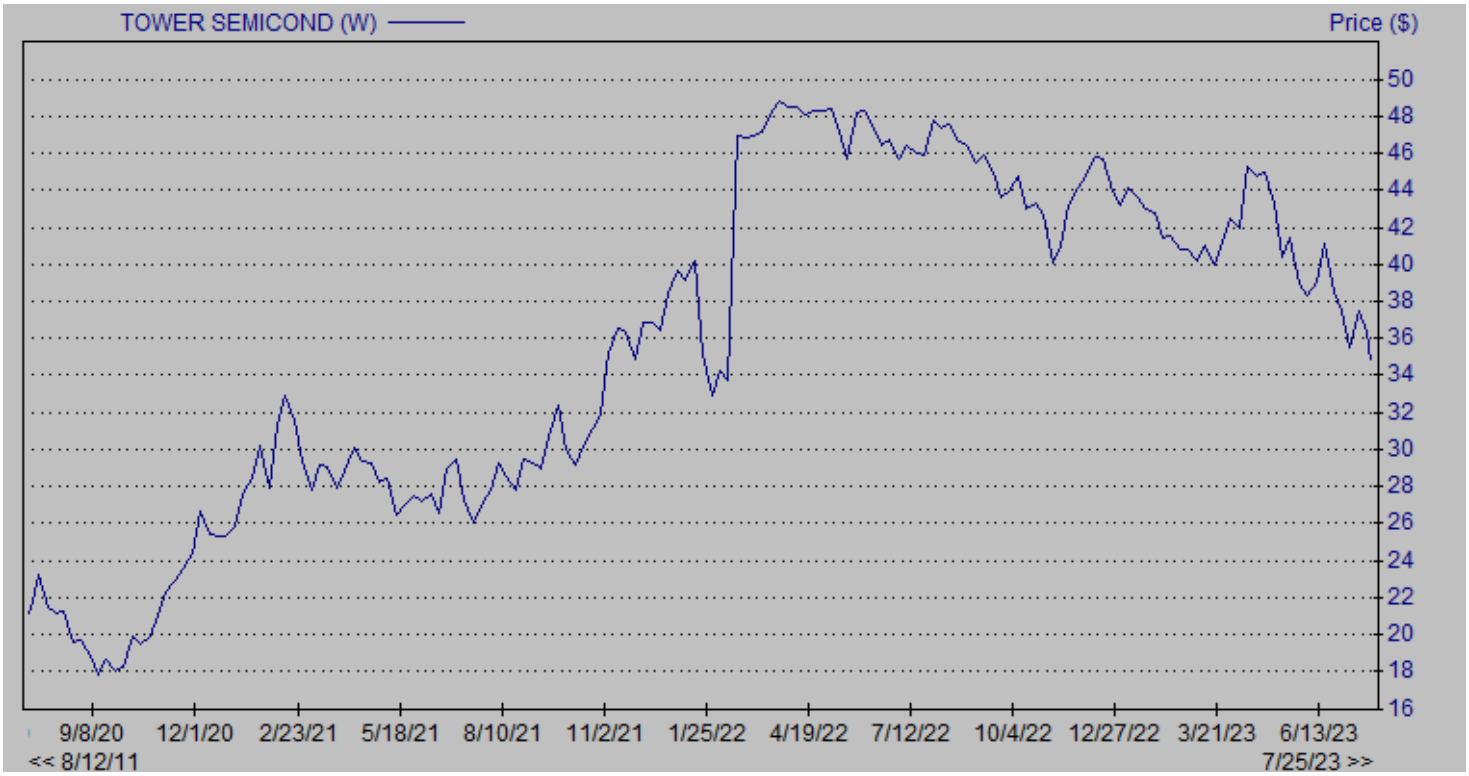
BALANCE SHEET

$ in thousands	June 30, 2023	Mar 31, 2023	Qtr-Qtr % Change	June 30, 2022	Yr-Yr % Change
CURRENT ASSETS					
Cash and cash equivalents	**$318,195**	**$304,934**	4.3%	**$211,177**	50.7%
Short term deposits	**419,520**	**469,284**	-10.6%	**468,298**	-10.4%
Marketable securities	**175,872**	**171,747**	2.4%	**176,487**	-0.3%
Trade accounts receivable	163,293	144,195	13.2%	170,552	-4.3%
Inventories	330,819	358,715	-7.8%	249,038	32.8%
Other current assets	32,396	35,416	-8.5%	43,253	-25.1%
Total current assets	1,440,095	1,484,291	-3.0%	1,318,805	9.2%
LONG-TERM INVESTMENTS	0	0		26,544	-100.0%
PROPERTY AND EQUIPMENT, NET	1,018,636	1,009,632	0.9%	878,991	15.9%
GOODWILL & INTANGIBLE ASSETS, NET	13,049	13,540	-3.6%	16,217	-19.5%
DEFERRED TAX & OTHER ASSETS, NET	62,288	69,623	-10.5%	83,866	-25.7%
TOTAL ASSETS	2,534,068	2,577,086	-1.7%	2,324,423	9.0%
CURRENT LIABILITIES					
Short term debt	**41,300**	**42,224**	-2.2%	**79,535**	-48.1%
Trade accounts payable	154,507	191,006	-19.1%	127,762	20.9%
Deferred revenue	22,402	30,268	-26.0%	38,632	-42.0%
Other current liabilities	83,631	90,637	-7.7%	100,246	-16.6%
Total current liabilities	301,840	354,135	-14.8%	346,175	-12.8%
LONG-TERM DEBT	**178,865**	**201,445**	-11.2%	**200,733**	-10.9%
LONG-TERM CUSTOMERS' ADVANCES	31,209	34,066	-8.4%	60,600	-48.5%
EMPLOYEE RELATED LIABILITIES	0	0	0.0%	13,962	-100.0%
DEFERRED TAX LIABILITY	11,057	11,188	-1.2%	14,403	-23.2%
Total liabilities	522,971	600,834	-13.0%	635,873	-17.8%
SHAREHOLDERS' EQUITY	2,011,105	1,976,252	1.8%	1,688,550	19.1%
TOTAL LIABILITIES AND EQUITY	$2,534,076	$2,577,086	-1.7%	$2,324,423	9.0%
Current Ratio	4.8	4.2	13.8%	3.8	25.2%
Quick Ratio	3.7	3.2	15.6%	3.1	18.9%
Working Capital	1,138,255	1,130,156	0.7%	972,630	17.0%
Debt Percent of Assets	9%	9%	-8.1%	12%	-27.9%
Debt to Equity	0.1	0.1	-11.2%	0.2	-34.0%
Cash and equivalents	913,587	945,965	-3.4%	855,962	6.7%
Cash and equivalents per share	$8.31	$8.60	-3.5%	$7.84	5.9%
Debt	220,165	243,669	-9.6%	280,268	-21.4%
Change in cash	(32,378)	(59,847)	-45.9%	65,066	-149.8%
Change in debt	(23,504)	(28,675)	-18.0%	11,720	-300.5%

CASH FLOW

	Year 2020	Year 2021	3-Mo 31-Mar-22	3-Mo 30-Jun-22	3-Mo 30-Sep-22	3-Mo 31-Dec-22	Year 2022	3-Mo 31-Mar-23	3-Mo 30-Jun-23
CASH FLOWS - OPERATING ACTIVITIES									
Net profit (loss)	$ 83,289	$ 154,075	$ 55,774	$ 58,173	$ 66,682	$ 85,842	$ 266,471	$ 81,368	$ 48,706
Income and non-cash expense items:									
Depreciation and amortization	240,531	270,710	70,780	67,007	74,958	79,893	292,638	62,387	63,579
Effect of fair value measurement on debt	6,645	1,138	(1,330)	2,276	104	9,312	10,362	(926)	3,102
Other expense (income), net	5,215	(1,461)	1,347	560	7,950	(2,923)	6,934	815	(149)
Changes in assets and liabilities:									
Trade accounts receivable	(33,087)	14,335	(35,181)	3,578	3,991	12,380	(15,232)	7,413	(21,241)
Other assets	(7,999)	(26,731)	13,874	(3,355)	527	9,381	20,427	(1,138)	2,114
Inventories	(2,891)	(44,192)	(18,328)	(10,630)	(25,510)	(23,423)	(77,891)	(57,420)	16,315
Trade accounts payable	(18,576)	(25,004)	30,595	22,415	(15,951)	(57,952)	(20,893)	44,542	(24,712)
Deferred revenue and customers' advances	(3,072)	74,524	3,385	(14,031)	(16,906)	(2,517)	(30,069)	(15,470)	(10,723)
Other current liabilities	347	16,850	15,103	10,974	20,725	14,231	61,033	(45,053)	(5,479)
Employee related liabilities	3,936	(2,681)	331	26	(220)	2,819	2,956	371	267
Deferred tax liability, net	2,223	(10,270)	221	1,104	6,052	5,707	13,084	(4,162)	3,715
Net cash provided by operating activities	**276,561**	**421,293**	**136,571**	**138,097**	**122,402**	**132,750**	**529,820**	**72,727**	**75,494**
CASH FLOWS - INVESTING ACTIVITIES									
Investments in property and equipment, net	**(256,539)**	**(279,260)**	**(80,840)**	**(49,377)**	**(45,134)**	**(38,186)**	**(213,537)**	**(105,245)**	**(89,433)**
Interest bearing deposits, including designated deposits	(107,070)	(59,684)	(29,611)	(65,134)	129,257	(150,423)	(115,911)	24,194	42,615
Net cash provided by (used in) investing activities	(363,609)	(338,944)	(110,451)	(114,511)	84,123	(188,609)	(329,448)	(81,051)	(46,818)
CASH FLOWS - FINANCING ACTIVITIES									
Exercise of warrants and options	2,512	458	44	0	5,469	(5,469)	44	0	0
Debt repayment	(63,699)	(77,315)	(30,539)	(8,211)	(28,164)	(11,465)	(78,379)	(28,796)	(10,093)
Proceeds from investment in subsidiary	0	0	0	0	0	11,685	11,685	1,932	0
Net cash used in financing activities	(61,187)	(76,857)	(30,495)	(8,211)	(22,695)	(5,249)	(66,650)	(26,864)	(10,093)
Effect of foreign exchange rate change	4,357	(6,245)	(3,071)	(7,682)	(4,638)	11,498	(3,893)	(637)	(5,322)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(143,878)	(753)	(7,446)	7,693	179,192	(49,610)	129,829	(35,825)	13,261
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	355,561	211,683	210,930	203,484	211,177	390,369	210,930	340,759	304,934
CASH AND CASH EQUIVALENTS - END OF PERIOD	211,683	210,930	203,484	211,177	390,369	340,759	340,759	304,934	318,195
Operating Cash Flow	$ 335,680	$ 424,462	$ 126,571	$ 128,016	$ 149,694	$ 172,124	$ 576,405	$ 143,644	$ 115,238
Free cash flow	$ 79,141	$ 145,202	$ 45,731	$ 78,639	$ 104,560	$ 133,938	$ 362,868	$ 38,399	$ 25,805

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

Zacks SCR Analysts hereby certify that the view expressed in this research report or blog article accurately reflects the personal views of the analyst about the subject securities and issuers. Zacks SCR also certifies that no part of any analysts' compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report or blog article. Zacks SCR believes the information used for the creation of this report or blog article has been obtained from sources considered reliable, but we 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. The Zacks SCR Twitter is covered herein by this disclosure.

INVESTMENT BANKING AND FEES FOR SERVICE

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, from an investment manager, 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 include 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.

Each issuer has entered into an agreement with Zacks to provide continuous independent research for a period of no less than one year in consideration of quarterly payments totaling a maximum fee of $40,000 annually.

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.

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer and, therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.