

Zacks Small-Cap Research

Sponsored – Impartial - Comprehensive

Lisa Thompson
312-265-9154
lthompson@zacks.com

scr.zacks.com

10 S. Riverside Plaza, Chicago, IL 60606

TowerJazz (TSEM-NASDAQ)

TSEM: Waiting For 2020 Capacity and Orders

We believe that the stock could be worth \$27.00 next year using industry average PE ratios given current earnings estimates.

Current Price (11/13/19) \$23.23
Valuation **\$27.00**

OUTLOOK

TowerJazz 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 high growth markets such as RF High Position analog, CMOS image sensors, and power management. It is reached the end of its first contract with its partner Panasonic and is receiving lower revenues from them since March 31 affecting revenue growth but possibly not profits. In 2020 it will expand capacity in Japan with a \$100 million investment in its fab.

SUMMARY DATA

52-Week High **\$23.23**
52-Week Low **\$13.59**
One-Year Return (%) **57.1**
Beta **1.3**
Average Daily Volume (sh) **558,706**

Shares Outstanding (mil) **106.6**
Market Capitalization (\$mil) **\$2,476**
Short Interest Ratio (days) **3.8**
Institutional Ownership (%) **51**
Insider Ownership (%) **1**

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

5-Yr. Historical Growth Rates
Sales (%) **12.6**
Earnings Per Share (%) **-9.5**
Dividend (%) **N/A**

P/E using TTM EPS **19.4**
P/E using 2019 Estimate **23.0**
P/E using 2020 Estimate **18.4**

Zacks Rank **N/A**

Risk Level
Type of Stock
Industry
Average
Mid-Blend
Elec Comp-Semis

ZACKS ESTIMATES

Revenue

(in millions of \$)

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
2017	330 A	345 A	355 A	358 A	1,387 A
2018	313 A	335 A	323 A	334 A	1,304 A
2019	310 A	306 A	312 A	312 E	1,240 E
2020					1,312 E

Earnings Per Share

(Adjusted non-GAAP Diluted)

	Q1	Q2	Q3	Q4	Year
	(Mar)	(Jun)	(Sep)	(Dec)	(Dec)
2017	\$0.50 A	\$0.54 A	\$0.60 A	\$0.58 A	\$2.21 A
2018	\$0.31 A	\$0.42 A	\$0.37 A	\$0.41 A	\$1.51 A
2019	\$0.30 A	\$0.24 A	\$0.25 A	\$0.25 E	\$1.01 E
2020					\$1.26 E

Zacks Projected EPS Growth Rate - Next 5 Years % **10**

WHAT'S NEW

2020 Should Show Orders Rebounding and Increased Capacity Where its Needed

Q3 came in right at the midpoint of guidance and Q4 looks to be almost identical with Q3. As predicted, margins increased sequentially as revenues grew. Business and profits should rebound for TowerJazz starting in Q1 2020 as two major growth issues begin to be resolved.

The first being addressed is the need for more capacity in 300mm. It is investing \$100 million in the 300mm TPSCo fab in Uozu, Japan. This will add capacity for its highly differentiated 300mm RF SOI, 65nm BCD Power Management, and CMOS imagers, both smallest pixel global shutter industrial imagers as well as high quantum efficiency stack imagers for facial recognition and high-end photography platforms, all of whom are exhibiting demand outstripping current capacity starting in Q1. Equipment that is now being ordered will ultimately be installed in the first half of 2020 and the capacity increase will be fully available by the end of the first half of Q2. The company estimates that at full utilization this capacity could provide \$70 million in annual revenues and leave the company with a total revenue capacity of \$1.65 billion.

Another growth inhibitor has been the weak market for data center. While customers have seen orders pick up, they still have three to five months of inventory to burn off before TowerJazz starts to see orders for components for new inventory. In addition to an inventory resolution, the newer higher throughput products (100GBPS) will require larger and more expensive components lifting TowerJazz revenues. This phenomenon will also play out in 5G deployments in both handsets and infrastructure.

2020 will also see the anniversary of the March Panasonic agreement that lowered 2019 revenues, aiding year over year growth comparisons next year.

TowerJazz reported Q3 2019 revenues of \$312 million versus \$312 million in Q2 and \$323 million a year ago (down 3%). New terms in TowerJazz's agreement with Panasonic went into effect March 31, 2019, reducing revenues paid by Panasonic to the joint venture of approximately \$20 million dollars per quarter. Excluding the revenues from both Panasonic and Maxim, revenues grew 11% year over year. The company has the exact same guidance for Q4 as it had for Q3-- a revenue range of \$296 million to \$328 million, which has a midpoint of \$312 million, flat sequentially, and down year over year.

Gross margin for the third quarter was 18.7% versus 22.5% a year ago and the 17.4% four-year low reported in Q2 2019.

Operating expenses increased \$1.6 million year over year but were down another \$159,000 sequentially. The operating margin declined to 7.3% from 12.0% year over year, but up sequentially from 5.8% in Q2 2019. On a dollar basis it was down 41%.

Pretax profit was \$22.3 million versus \$36.1 million a year ago. It was up sequentially from the \$18.7 million reported for Q2 2019.

The company again took a reversal of taxes in the quarter of \$61,000. The company expects a tax rate of 1% for the total year. This compares with a tax rate of 4.3% last year.

GAAP net income was \$22.2 million versus \$33.7 million last year, while non-GAAP net income was \$26.5 million versus \$38.0 million.

Diluted GAAP EPS was \$0.21 per share versus \$0.34 last year. Adjusted non-GAAP EPS declined to \$0.25 versus \$0.37 a year ago. Average diluted shares for the quarter were 107.6 million up from 102.1 million last year, due to the conversion of the Jazz bonds.

EBITDA for the third quarter of 2019 was \$75.1 million compared to \$89.1 million a year ago and up sequentially from \$70.1 million in Q2 2019.

Balance Sheet and Capacity

The company has **cash, short-term deposits, and marketable securities of \$723 million** compared to \$699 million last quarter while decreasing debt by \$1.6 million to \$319 million. The company plans to invest \$100 million in capacity expansion in Japan.

Its quick ratio is high at 3.7xs and it has \$821 million in working capital. The company has been stockpiling cash to pay for both capacity expansion, as well as to acquire companies that contribute complementary products or technology.

Utilization

The current fab capacity will allow the company to grow revenues and improve margins through capacity utilization. Fab 1 utilization again declined due to a worldwide slowdown in power discretets, with no sign of a rebound. TowerJazz had more decline in capacity utilization at Fab 3 (Newport Beach) due to the continued weakness for silicon germanium demand for data centers. The company looks for orders to pick in 3-5 months as the customer inventory correction abates. San Antonio remained at about 50% utilization but was impacted by a decline in discretets. TowerJazz has made the decision to expand capacity by investing \$100 million at its Uozu 300 millimeter foundry in Japan. Although the blended capacity of the three TPSCo foundries remained at 50%, the Uozu 300-millimeter foundry is at 60% and continues to experience demand that outstrips capacity.

The company targets 85% utilization at its fabs and believes that level gives the company the capacity to generate \$1.65 billion in revenues. Its current fabs were at the following capacity utilization at quarter end:

	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Fab1 Migdal Haemek, Israel 6"	87%	90%	91%	93%	90%	95%	90%	90%	84%	76%	60%
Fab2 Migdal Haemek, Israel 8"	89%	85%	86%	85%	80%	85%	80%	76%	70%	80%	80%
Fab3 Newport Beach, CA 8"	87%	86%	81%	76%	80%	85%	85%	90%	80%	70%	50%
Three TPSCo factories	50%	50%	58%	60%	50%	50%	60%	55%	50%	50%	55%
San Antonio, 8"	60%	60%	60%	60%	55%	60%	50%	50%	50%	50%	50%

Analog IC Group

RF mobile business continues to show strong growth as production of 300mm RF SOI ramped. Revenues for RF SOI hit a record in this quarter. Based on its design win pipeline, and increased capacity, 2020 should have good growth in RF SOI. TowerJazz expects to continue to gain market share as it captures more design slots. In addition, new 5G handsets will require more RF content increasing revenue per handset for TowerJazz. Its strong position in RF MEMS technology should also be a plus in future years. The company is seeing orders for SiGe for 5G infrastructure, where speeds are moving from 10GBPS to 25GBPS. The data center inventory correction should be resolved in three to five months as customers work off excess inventory and orders should then again resume for TowerJazz.

Power Management

In 2018, this business was 34% of sales. It is growing strongly sequentially due to a ramp in production of battery management products for electric vehicles. There has been numerous design wins from Tier 1 customers.

CMOS Image Sensors Business

In 2018, sensors were 18% of total revenue. This group has new projects using its 65nm global shutter platform that should see begin at the end of next year. The soft industrial sensor market is returning to double-digit growth after a weak first half. There is continued interest in using TowerJazz's new technology in facial recognition sensors for smartphones, and sensors for fingerprint detection under OLED and LCDs.

TOPS

The TOPS business continued weak this year due to customers' inventory corrections and is comprised mostly of power discretets. The automotive business however continues to grow. The company's tunnel magnetoresistance sensor technology (TMR) is getting great interest from a variety of markets as it provides higher performance and sensitivity while consuming less power.

KEY POINTS

- Although the semiconductor market is typically considered cyclical, we believe that based on the end-user markets for which TowerJazz's products used, it should be less so. The company is currently being impacted in slow mobile handsets, data centers and infrastructure sales as well as weakness in China and the US ban on Huawei, which is delaying spending.
- As a foundry, the company has natural operating leverage given its high fixed costs. Every dollar in revenue tends to add over \$0.50 to gross margin. When the company adds 12" revenues that blended percentage will trend higher as 12" can sell at 60+ gross margins. 300nm product also enjoys higher gross margins
- The company has a strong market position in high quality imaging and 3D, which is increasing being used for gesturing controls, machine vision, security anti-crash systems and self driving cars, as well as smartphones with high megapixel cameras. In this area its primary competition is Sony, which makes it a preferable source for many companies that compete with Sony.
- The company has considerable exposure to 5G and should be a major beneficiary of this transition in 2020.
- Having Panasonic (who generated 33% of the company's revenues in 2018) as a partner gives the company increased stature in the industry and has attracted new customers who have a favorable disposition to working with a trusted and known company with high quality product and leading edge expertise in imaging. However TowerJazz expects to receive less revenue from Panasonic going forward and this has effected earnings expectations.
- We believe the stock is currently undervalued on a PE basis versus peers. Our price target is \$27.00 per share, and we expect continued sequential improvement in earnings and margins going forward.

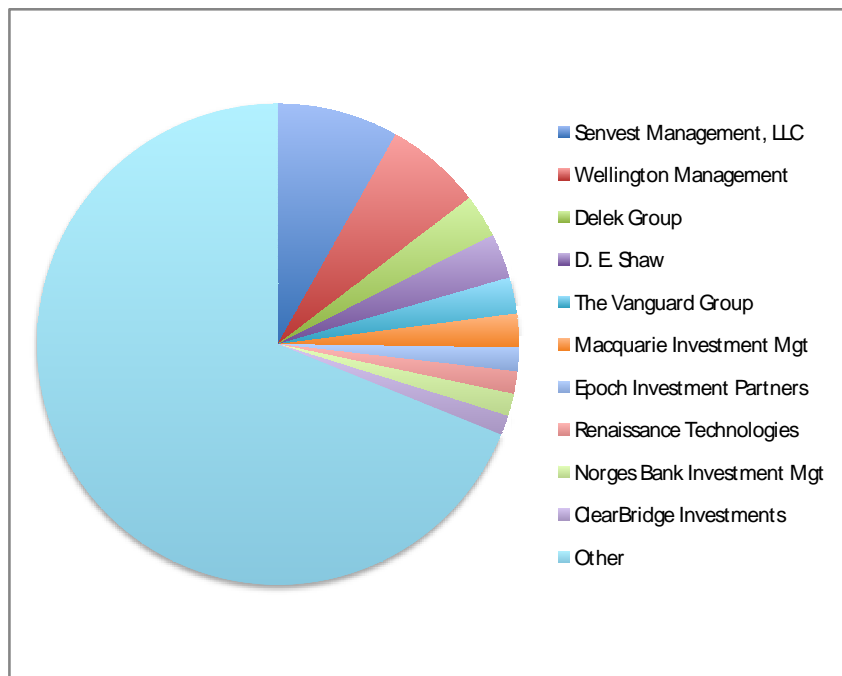
VALUATION

Our fully diluted non-GAAP EPS estimate for 2019 for TSEM is \$1.01 and our 2020 EPS estimate is \$1.26, leading to a price target of \$27.00 using an average of a 22x PE. The biggest risks to the stock is that weakness in the industry in general and China in specific continues, or the ramp to 300 mm technology is impeded or constrained, or that an acquisition causes dilution or earnings hit.

Foundry Companies

<u>Company</u>	<u>Ticker</u>	<u>EPS 19E</u>	<u>EPS 20E</u>	<u>Price</u>	<u>PE 2019</u>	<u>PE 2020E</u>
Semiconductor Manufacturing	SMICY	0.00	0.03	6.33	NM	211.0
Taiwan Semiconductor	TSM	2.13	2.69	52.15	24.5	19.4
United Microelectronics	UMC	0.12	0.18	2.35	19.6	13.1
X-Fab	XFAB.PA	0	0	4.17	NM	NM
Average					22.0	16.2

OWNERSHIP



Source: Zacks Investment Research

INCOME STATEMENT

	March Q1 18	June Q2 18	Sept Q3 18	Dec Q4 18	March Q1 19	June Q2 19	Sept Q3 19	Dec Q4 19E	2018	2019E	2020E
REVENUE	312.7	335.1	322.6	333.6	310.1	306.1	312.1	312.0	1,304.0	1,240.3	1,312.0
Yr-to-yr Gr.	-5%	-3%	-9%	-7%	-1%	-9%	-3%	-6%	-6%	-5%	6%
OPERATING EXPENSES											
Cost of goods sold	246.5	256.6	250.0	258.0	247.0	252.7	253.8	253.8	1,011.1	1,007.2	1,050.2
Gross Margin	66.2	78.5	72.6	75.6	63.2	53.4	58.3	58.2	292.9	233.1	261.8
% of Sales	21.2%	23.4%	22.5%	22.7%	20.4%	17.4%	18.7%	18.7%	22.5%	18.8%	20.0%
R&D	18.3	18.2	18.2	18.4	19.2	18.8	18.7	18.7	73.1	75.4	76.0
M, G&A	16.0	16.1	15.8	17.0	16.6	16.8	16.8	16.8	65.0	67.2	69.0
One-time charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Tot Operating Exp.	34.3	34.3	34.1	35.4	35.8	35.7	35.6	35.6	138.0	142.6	145.0
Operating Income	31.9	44.2	38.6	40.2	27.3	17.8	22.7	22.7	154.9	90.5	116.8
Operating Margin	10%	13%	12%	12%	9%	6%	7%	7%	12%	7%	9%
Yr-to-yr Gr.	-40%	-23%	-30%	-26%	-14%	-60%	-41%	-44%	-30%	-39%	22%
Net Interest	(0.6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.6)	0.0	0.0
Other non-cash financing expense	(3.2)	(7.0)	(2.5)	(3.9)	0.7	0.9	(0.4)	0.0	(16.6)	1.2	1.3
Other income	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
Gain from acquisition	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	28.1	38.8	36.1	36.3	28.1	18.7	22.3	22.7	139.3	91.7	118.1
Profit margin	9.0%	11.6%	11.2%	10.9%	9.1%	6.1%	7.1%	7.3%	10.7%	7.4%	9.0%
Taxes	(1.0)	(2.8)	(2.4)	0.2	(1.7)	1.0	0.1	(0.3)	(5.9)	(0.9)	(3.0)
Tax Rate	3.4%	7.2%	6.6%	-0.5%	5.9%	5.4%	0.3%	1.3%	4.3%	1.0%	2.5%
Profit before non-controlling Minority Income	27.2 (1.1)	36.0 1.7	33.7 (0.0)	36.5 1.6	26.4 (0.2)	19.7 1.2	22.4 (0.2)	22.4 (0.2)	133.4 2.2	90.8 0.7	115.1 8.0
GAAP Net income	26.1	37.7	33.6	38.1	26.2	20.9	22.2	22.2	135.6	91.5	123.1
Yr-to-yr Gr.	-43%	-25%	-39%	-74%	0%	-45%	-34%	-42%	-55%	-32%	34%
Non-GAAP Net Income	31.1	42.1	38.0	43.6	31.7	25.3	26.5	26.5	154.8	109.93	137.67
GAAP primary EPS	\$0.27	\$0.38	\$0.34	\$0.37	\$0.25	\$0.20	\$0.21	\$0.21	1.35	\$0.86	\$1.15
Fully diluted GAAP	\$0.26	\$0.37	\$0.33	\$0.36	\$0.25	\$0.20	\$0.21	\$0.21	1.32	\$0.85	\$1.14
Adj Non-GAAP EPS-Fully dil.	\$0.31	\$0.42	\$0.37	\$0.41	\$0.30	\$0.24	\$0.25	\$0.25	\$1.51	\$1.01	\$1.26
Yr-to-yr Gr.	-48%	-31%	-45%	-38%	-20%	-53%	-45%	-50%	-32%	-33%	25%
Primary Share Out	98.5	98.9	100.2	104.0	105.3	106.3	106.6	106.6	100.4	106.2	106.6
Fully Diluted GAAP	101.1	101.1	102.1	105.8	107.0	107.2	107.6	107.6	102.5	107.3	107.6
All in shares	107.7	107.9	108.1	108.1	108.2	109.0	109.0	109.0	108.0	108.8	109.0
EBITDA	84.3	95.5	89.1	92.7	78.8	70.1	75.3	78.9	361.6	294.5	320.8
EBITDA Margin	27%	29%	28%	28%	25%	23%	24%	25%	28%	24%	24%

BALANCE SHEET

\$ in thousands	Sept 30, 2019	June 30, 2019	Qtr-Qtr % Change	Sept 30, 2018	Yr-Yr % Change
CURRENT ASSETS					
Cash and cash equivalents	\$417,636	\$405,158	3.1%	\$464,446	-10.1%
Short term deposits	159,230	\$147,032	8.3%	0	NA
Marketable securities	146,264	\$146,893	-0.4%	143,041	2.3%
Trade accounts receivable	123,519	123,789	-0.2%	163,747	-24.6%
Inventories	187,902	174,806	7.5%	159,507	17.8%
Other current assets	21,571	22,374	-3.6%	20,967	2.9%
Total current assets	1,056,122	1,020,052	3.5%	951,708	11.0%
LONG-TERM INVESTMENTS					
LONG-TERM INVESTMENTS	36,662	36,874	-0.6%	31,179	17.6%
PROPERTY AND EQUIPMENT, NET	703,569	707,122	-0.5%	639,042	10.1%
INTANGIBLE ASSETS, NET	10,800	11,279	-4.2%	15,006	-28.0%
GOODWILL	7,000	7,000	0.0%	7,000	0.0%
DEFERRED TAX & OTHER ASSETS, NET	90,269	89,171	1.2%	96,722	-6.7%
TOTAL ASSETS	1,904,422	1,871,498	1.8%	1,740,657	9.4%
CURRENT LIABILITIES					
Short term debt	64,774	45,173	43.4%	45,697	41.7%
Trade accounts payable	104,366	92,747	12.5%	114,375	-8.8%
Deferred revenue	6,539	7,975	-18.0%	10,059	-35.0%
Other current liabilities	59,065	65,904	-10.4%	72,160	-18.1%
Total current liabilities	234,744	211,799	10.8%	242,291	-3.1%
LONG-TERM DEBT					
LONG-TERM DEBT	254,683	275,914	-7.7%	247,757	2.8%
LONG-TERM CUSTOMERS' ADVANCES	32,843	27,230	20.6%	29,978	9.6%
EMPLOYEE RELATED LIABILITIES	13,818	14,295	-3.3%	14,649	-5.7%
DEFERRED TAX LIABILITY	45,598	47,403	-3.8%	52,696	-13.5%
Total liabilities	581,686	576,641	0.9%	587,371	-1.0%
SHAREHOLDERS' EQUITY					
SHAREHOLDERS' EQUITY	1,322,736	1,294,857	2.2%	1,153,286	14.7%
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$1,904,422	\$1,871,498	1.8%	\$1,740,657	9.4%
Financial Ratios					
Current Ratio	4.5	4.8	-6.6%	3.9	14.5%
Quick Ratio	3.7	4.0	-7.3%	3.3	13.1%
Working Capital	821,378	808,253	1.6%	709,417	15.8%
Debt Percent of Assets	17%	17%	-2.2%	17%	-0.5%
Debt to Equity	0.2	0.2	-2.6%	0.3	-5.1%
Cash and equivalents	\$723,130	\$699,083	3.4%	607,487	19.0%
Cash and equivalents per share	\$6.76	\$6.52	3.6%	\$6.07	11.5%
Debt	319,457	321,087	-0.5%	293,454	8.9%

CASH FLOW

	3-Mo	3-Mo	3-Mo	3-Mo	Year	3-Mo	3-Mo	3-Mo	3-Mo	Year	3-Mo	3-Mo	3-Mo
	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17	2017	31-Mar-18	30-Jun-18	30-Sep-18	31-Dec-18	2018	31-Mar-19	30-Jun-19	30-Sep-19
CASH FLOWS - OPERATING ACTIVITIES													
Net profit (loss)	\$ 47,046	\$ 51,727	\$ 54,241	\$ 148,642	\$ 301,656	\$ 27,181	\$ 36,009	\$ 33,674	\$ 36,515	\$ 133,379	\$ 26,400	\$ 19,722	\$ 22,354
Income and non-cash expense items:													
Depreciation and amortization	49,698	52,389	55,014	51,310	208,411	53,977	53,493	52,764	54,157	214,391	52,014	52,853	53,203
Effect of fair value measurement on debt	6,888	4,873	(1,177)	2,281	12,865	(1,740)	(4,797)	788	(4,042)	(9,791)	4,001	2,204	3,095
Other expense (income), net	(511)	(142)	253	3,027	2,627	(22)	(1,578)	36	4,006	2,442	(17)	(428)	(266)
Changes in assets and liabilities:													
Trade accounts receivable	9,529	(17,242)	361	788	(6,564)	8,089	(18,351)	(3,767)	10,933	(3,096)	18,606	12,665	(496)
Other receivables and other current assets	(4,439)	(7,307)	2,980	445	(8,321)	3,370	5,713	(919)	3,096	11,260	(3,705)	(2,050)	(1,978)
Inventories	(1,421)	1,688	(4,636)	92	(4,277)	(2,692)	(6,713)	(7,237)	(9,702)	(26,344)	(3,395)	378	(13,276)
Trade accounts payable	(4,128)	(6,530)	4,795	(2,786)	(8,649)	(6,313)	10,222	(2,688)	(4,783)	(3,562)	(2,651)	(12,553)	12,110
Deferred revenue and customers' advances	(8,735)	(4,564)	9,378	(17,882)	(21,803)	(712)	(5,466)	35	8,768	2,625	(10,685)	(2,964)	4,178
Other current liabilities	(9,090)	12,866	(13,760)	1,765	(8,219)	(4,219)	13,355	(2,764)	(7,239)	(867)	(4,803)	2,957	(6,494)
Employee related liabilities	(257)	(234)	(274)	(2,482)	(3,247)	(387)	193	(240)	(361)	(795)	68	(29)	(32)
Deferred tax liability, net	(2,440)	(3,230)	(3,259)	(99,915)	(108,844)	(1,531)	(5,151)	(211)	148	(6,745)	(965)	(599)	337
Net cash provided by operating activities	82,140	84,294	103,916	85,285	355,635	75,001	76,929	69,471	91,496	312,897	74,868	72,156	72,735
CASH FLOWS - INVESTING ACTIVITIES													
Investments in property and equipment, net	(40,348)	(41,312)	(41,708)	(41,349)	(164,717)	(40,047)	(40,148)	(40,892)	(48,654)	(169,741)	(41,718)	(43,727)	(43,017)
Interest bearing deposits, including designated deposits	(5,118)	0	(49,869)	(64,867)	(114,736)	(14,963)	(15,488)	(4,899)	(123,126)	(158,476)	(6,726)	(27,099)	(11,573)
Net cash provided by (used in) investing activities	(45,466)	(41,312)	(91,577)	(106,216)	(279,453)	(55,010)	(55,636)	(45,791)	(171,780)	(328,217)	(48,444)	(70,826)	(54,590)
CASH FLOWS - FINANCING ACTIVITIES													
Exercise of warrants and options	12,756	14,254	1,027	3,278	31,315	658	26	21	9	714	397	0	43
Debt repayment	(11,805)	(5,655)	(15,932)	(16,863)	(50,255)	(6,656)	3,809	(43,078)	(2,924)	(48,849)	(3,074)	(7,475)	(5,606)
TPSCO dividend to Panasonic	(4,378)	0	0	0	(4,378)	0	0	0	0	0	0	0	0
Net cash used in financing activities	(3,427)	8,599	(14,905)	(13,585)	(23,318)	(5,998)	3,835	(43,057)	(2,915)	(48,135)	(2,677)	(7,475)	(5,563)
Effect of foreign exchange rate change	4,371	(91)	(630)	70	3,720	4,707	(2,909)	(3,057)	3,844	2,585	(740)	3,205	(104)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	37,618	51,490	51,771	(34,446)	56,584	18,700	22,219	(22,434)	(79,355)	(60,870)	23,007	(2,940)	12,478
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	355,284	432,113	311,062	480,407	389,377	445,961	464,661	486,880	464,446	445,961	385,091	408,098	405,158
CASH AND CASH EQUIVALENTS - END OF PERIOD	392,902	483,603	362,833	445,961	445,961	464,661	486,880	464,446	385,091	385,091	408,098	405,158	417,636
Operating Cash Flow	\$ 103,121	\$ 108,847	\$ 108,331	\$ 205,260	\$ 525,559	\$ 79,396	\$ 83,127	\$ 87,262	\$ 90,636	\$ 340,421	\$ 82,398	\$ 74,351	\$ 78,386
Free cash flow	\$ 62,773	\$ 67,535	\$ 66,623	\$ 163,911	\$ 360,842	\$ 39,349	\$ 42,979	\$ 46,370	\$ 41,982	\$ 170,680	\$ 40,680	\$ 30,624	\$ 35,369

HISTORICAL STOCK PRICE



Source: Zacks Investment Research

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 reflect 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.