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Zacks Small-Cap Research

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CAS Medical Systems Inc. (CASM-NASDAQ)

CASM: FORE-SIGHT Momentum Continues, Moving PT to $4.50/share

Based on EV/S and P/S comps other publicly traded companies in the tissue oximeter, patient monitoring and cardiac surgery industries including BABY, MASI, BRSYF and MDT, CASM should trade near $4.50/share.

Current Price (08/06/18)	$2.40
Valuation	**$4.50**

OUTLOOK

The momentum that began in Q4 of last year continues with CAS Medical turning in another relatively very strong quarter. The FORE-SIGHT business, particularly as it relates to the U.S. market, continues to impress. The U.S. installed base expanded by 25% yoy during the first half of 2018 and domestic sensor sales have now set new record highs for three consecutive quarters. U.S. FORE-SIGHT revenue grew by an average of 20% yoy over the last three quarters (including 20% in Q2). For context, that compares to growth of less than 1% in 1H 2017 and just 5% growth through the full-year 2017. And while international FORE-SIGHT sales dipped 8% qoq, they managed 4% growth against a tough prior-year comp and are up 17% through the first half of 2018. The combination of strong top-line growth, substantial widening of gross margin and flattening operating expenses has resulted in rapid improvement in operating loss and cash burn. Operating loss has now set new record lows for four consecutive quarters - a trend which is expected to continue. Meanwhile, cash burn is also at a record low and management anticipates now achieving cash-flow break even by late 2019 (slightly delayed from 'mid-2019' due to U.S. tariffs on Chinese imports). OEM Module could be another catalyst to growth.
Our price target has moved from $4.00 to $4.50/share.

SUMMARY DATA

52-Week High	**$2.40**
52-Week Low	**$0.59**
One-Year Return (%)	**84.17**
Beta	**-0.40**
Average Daily Volume (sh)	**187,184**
Shares Outstanding (mil)	**29**
Market Capitalization ($mil)	**$64**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**23**
Insider Ownership (%)	**38**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**-2.6**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2018 Estimate	**N/A**
P/E using 2019 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Avg.,**
Type of Stock	**N/A**
Industry	**Med Products**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	**Q2** (Jun)	**Q3** (Sep)	**Q4** (Dec)	**Year** (Dec)
2017	4.5 A	4.6 A	4.5 A	5.0 A	18.8 A
2018	5.5 A	5.3 A	5.3 E	5.4 E	21.3 E
2019					24.0 E
2020					26.9 E

Earnings per Share

	Q1 (Mar)	**Q2** (Jun)	**Q3** (Sep)	**Q4** (Dec)	**Year** (Dec)
2017	-$0.09 A	-$0.09 A	-$0.01 A	-$0.07 A	-$0.27 A
2018	-$0.07 A	-$0.08 A	-$0.07 E	-$0.07 E	-$0.27 E
2019					-$0.16 E
2020					-$0.07 E

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

WHAT'S NEW…

Q2 2018 Financial Results, Operating Update

The momentum that began in Q4 of last year continues with CAS Medical turning in another relatively very strong quarter. The FORE-SIGHT business, particularly as it relates to the U.S. market, continues to impress. The U.S. installed base expanded by 25% yoy during the first half of 2018 and domestic sensor sales have now set new record highs for three consecutive quarters. U.S. FORE-SIGHT revenue grew by an average of 20% yoy over the last three quarters (including 20% in Q2). For context, that compares to growth of less than 1% in 1H 2017 and just 5% growth through the full-year 2017. And while international FORE-SIGHT sales dipped 8% qoq, they managed 4% growth against a tough prior-year comp and are up 17% through the first half of 2018.

And while we think the international segment will remain somewhat variable, the domestic business is where CASM has hands-on involvement and success on their initiatives is showing up in sensor sales – an important metric given that it's a proxy for utilization and these consumables represent more margin than does system shipments. Lack of sensors sales growth had been a concern of ours given that it was constraining total revenue growth (sensors account for ~90% of total FORE-SIGHT revenue) and because of the implication that utilization may have stalled. For context, total sensor sales were $4.05M (including $3.47M in U.S.) in Q2 '16 and just $3.90M (including $3.45M in U.S.) in Q3 '17 (with little interim variability) – over the same period the total installed base grew 22% (1,871 – 2,279). The U.S. installed base accounts approximately 55% of the total and also grew 22% over that period.

But, recent performance has been much more encouraging with FORE-SIGHT sensors revenue posting strong growth in the last three quarters; Q4 '17 (+7% yoy, +11% qoq), Q1 '18 (+18% yoy, +10% qoq) and Q2 '18 (13% yoy, -1% qoq). As we noted earlier in 2018, we think the recent strength may be a harbinger of even stronger sensors growth (and potentially higher utilization) to come as management continues to guide for U.S. sensors sales to grow in the mid-teen percentages in 2018. And, following the strong international sensors revenue through 1H, management again revised previously issued international revenue growth guidance from a low double-digit % decline (initially) to high single-digit % growth (as of Q1 results) to low double-digit % growth (current).

Importantly, not only is CASM not chasing revenue at the expense of margins or operating-bloat, it's just the opposite. Recent introduction of new, higher margin sensors and improved monitor pricing has benefitted both revenue and gross margins. Average monitor pricing in the U.S., per our calculations, was near record highs and international monitoring pricing also relatively healthy. Gross margin jumped 340 bps from Q1 and 801 bps yoy to a record 60.1% in Q2. While recently implemented U.S. tariffs on China-based imports might take a bite off that level, management still expects GM to remain elevated from historical levels.

Operating efficiency, another of management's stated goals, has also shown meaningful improvement as evidenced by operating expenses contracting 2% yoy in the first half of 2018 with revenue increasing 18% over the same period. In fact, operating expenses as a percentage of revenue through 1H 2018 appear to be at the lowest level of any two consecutive quarters of any fiscal year in history.

We think much of the improvement in operating efficiency relates to productivity gains of the company's salesforce - something that management has mentioned as an anticipated outcome as reps gain tenure. More sales per rep and at average higher prices means more revenue at very little incremental cost - which flows through to operating income.

The combination of strong top-line growth, substantial widening of gross margin and flattening operating expenses has resulted in rapid improvement in operating loss and cash burn. Operating loss has now set new record lows for four consecutive quarters - a trend which is expected to continue. Meanwhile, cash burn is also at a record low and management anticipates now achieving cash-flow break even by late 2019 (slightly delayed from 'mid-2019' due to U.S. tariffs on Chinese imports). Importantly, with $5.2M in cash on the balance sheet and another $1.8M available under CASM's recently refinanced credit facility, the company continues to maintain a strong liquidity position.

Financials

Total revenue increased 16% yoy and fell 3% from Q1 '18. U.S. FORE-SIGHT revenue was $4.4M, up 20% yoy and down 2% from Q1. U.S. revenue was driven by growth of the monitor installed base (43 units shipped in Q2), higher average per-unit monitor pricing and growth of sensor sales. International FORE-SIGHT revenue was $763k, up 4% yoy and down 8% sequentially. Growth in international sales reflects 23 monitor shipments (vs 17 in Q2 '17) and strong sensor sales, partially offset by lower average per-monitor pricing.

Compared to the prior year periods, total FORE-SIGHT revenue increased 17% in Q2 and 20% in 1H 2018. FORE-SIGHT sensors revenue, which accounted for approximately 88% of total revenue (and 90% of tissue oximetry revenue), increased 13% in Q2 and 16% in 1H. U.S. sensors revenue, which accounted for ~86% of total sensors revenue, increased 15% in both Q2 and 1H. Management noted previously that the pediatric channel has become a significant contributor to U.S. sensors sales – accounting for a significant portion of growth in Q1. Meanwhile, international sensor sales increased 5% in Q1 and 21% in 1H 2018.

We had previously reported a 'per installed (monitor) unit' metric as a way to gauge utilization. But, as CASM began excluding legacy monitors (which are not compatible with the new sensors) from the aggregate installed base calculation, we have excluded that from our analysis as historic comparisons are less meaningful. However, as the new installed base methodology gains history (in the future), that may again provide for apples-to-apples comparisons.

Gross margin widened to 60.1% in Q2 which compares to 56.7% in Q1 '18, 52% in Q2 '17 and 54.7% for the full year 2017. Margin improvement is coming from several areas including cost-savings initiatives, the recent introduction of lower cost sensors, more monitors sold versus placed and growth in sensors sales. While management had expected GM to continue to widen from current levels, the recent imposition of tariffs on Chinese goods could (if they remain in place) hamper that. Nonetheless, even with the offset from tariffs, management is still expecting GM to remain at or near this very healthy recent level. We are modeling GM of 58.6% in 2018, implying a 390 basis point improvement from 2017.

OpEx were just $4.3M and $8.5M in Q1 and 1H 2018, or 81% and 80% of total revenue, respectively. That compares to 95% and 96% of revenue in the prior year periods and 88% for the full year 2017. Particularly encouraging is that OpEx as a percentage of revenue (analogous to operating leverage) has shown regular improvement over the last six quarters. OpEx has remained roughly flat since Q1 '17 while revenue has grown 16% and gross margin widened 550 basis points. While we think sales and marketing expenditures will tick up as a result of the recent increase in the size of the sales force and higher revenues, we think SG&A as a percentage of revenue will continue to fall (although there may be some short-term volatility) as management has stressed that they are determined to improve the bottom-line and cash burn. Coupled with expectations of revenue growth and margin improvement, management had previously guided for reaching a level of positive EBITDA by Q4 2018 and positive cash flow by mid-2019 - but, with the recent tariffs, those timelines have been pushed back by about two quarters.

In terms of cash…..cash used in operating activities was $1.1M and $1.2M ($875k and $1.8M, ex-changes in working capital) in the three and six months ending 6/30/18, compared to $1.7M and $2.5M ($1.8M and $3.1M, ex-changes in working capital) in the comparable prior year periods.

PP&E-related CapEx, including capitalized monitors, consumed an additional $474k in 1H '18. CASM exited Q2 with $5.2M in cash on the balance sheet and has $1.8M available under their newly-refinanced bank facility (which increased their total borrowing capacity by $2M and reduced their interest rate 230 basis points). While we had previously thought that their cash and available borrowing capacity may be sufficient to get them to a point of cash flow break-even, the imposition of tariffs will now make that less likely. Nonetheless, with the continued expectation that cash burn will decrease, we think any additional capital needs may be relatively minimal.

OUTLOOK

As it relates to the sales force, turnover meant that average tenure (and related productivity) had previously fallen and took U.S. sales growth with it. However, despite the lack of overall growth, there were indications that the correlation between tenure and revenue growth also held true as the sales force aged. Management had noted that overall productivity was improving and sensor-related revenue growth among the more tenured reps was relatively very strong. That trend appears to continue – as management has regularly pointed to productivity gains, particularly among the less seasoned reps, as directly benefitting U.S. sensors and monitor revenue. With "full productivity" estimated to take approximately 9 – 12 months to reach and 14 of the 16 current reps having at least one-full year of experience, we think the sales force could be placing 100 monitors or more per quarter in the U.S. by the end of 2018 (for reference 198 monitors were shipped in the U.S. in 2017).

As it relates to wholesale networks, while CASM continues to have great success in winning new business when head-to-head evaluations of FORE-SIGHT vs. competitors' technology is done at the clinician level (i.e. when functionality, utility and clinical outcomes are the decision-making criteria), competitors have had success in thwarting CASM's market share gains by use of IDNs and GPOs, where the purchasing decision is often based mostly on price. CASM's recently implemented initiatives aimed at the IDN/GPO channels and of targeting hospital networks and other large accounts appears to be already paying dividends. Recent wins in just the last few months already contributed – and were associated with the strong domestic performance in monitor and sensors sales since late 2017. That momentum has flowed into 2018 with CASM winning a contract with one of the largest GPOs in the U.S. (which represents ~200 hospitals).

It seems clear that when CASM can shift the conversation and decision-making to clinical outcomes and functionality, their chance of winning new business goes way up. The clinical superiority of their product is supported by the ~70%-75% new customer close rate when prospective clinicians perform a clinical evaluation of FORE-SIGHT. Approximately 50% of new monitor placements reflect market share gains (i.e. account wins from competitors) with the other 50% related to expansion of the tissue oximetry market. Expect CASM to take their leverage their industry leading performance as they further engage the pediatric channel, which was responsible for ~one-third of the 15% yoy U.S. sensors sales growth in Q1.

New sensors and efficiency gains are showing up in gross margin and regular improvement in operating loss and cash burn. These catalysts are expected to continue to make a positive impact. And while recently imposed tariffs will be a headwind and likely push out the timeline for reaching cash flow break-even, management still thinks that is possible before the end of next year.

Clinical superiority of FORE-SIGHT as well as continued expansion of the overall tissue oximetry market represent the long-term revenue catalysts, in our opinion. With additional evidence of the utility in various procedures and associated improved patient outcomes when cerebral oximetry is employed, the size of the market will undoubtedly continue to expand and remains relatively under-penetrated. So, while the recent headwinds were disruptive, we think their high win-rate when prospective customers perform a clinical evaluation of FORE-SIGHT speaks to the robustness of the clinical competitive advantage of their technology which we believe will translate into continued market share gains.

CASM could also soon benefit from a supplemental revenue stream as they hope to roll-out their FORE-SIGHT technology into a format compatible with third-party monitors. This 'FORE-SIGHT OEM Module', 510(k) clearance of which was obtained in May of this year, will provide all of the same FORE-SIGHT functionality but without the need for CASM's monitor (instead, a cable will interface between third-party monitors and the FORE-SIGHT sensors). CASM already has a partnership lined up (with more possibly to come) with one third-party monitor manufacturer. FDA 510(k) clearance will be required for the combination product - filing of which is expected by current year-end. If all goes well, meaningful revenue from this product could commence next year. Potential other benefits include efficient distribution channel and immediate expansion of their Rolodex and sales reach.

VALUATION

We think the performance advantages of FORE-SIGHT compared to competing systems, most notably market-leading INVOS, coupled with increasing adoption of cerebral oximetry in surgical and other applications sets the stage for deeper and wider market penetration of FORE-SIGHT over the longer-term. Sales force productivity gains should further facilitate growth of the installed base over the longer-term and, most importantly, increase aggregate utilization and related sensor sales. We have yet to model meaningful market expansion (depth or widening) related to the (likely) impending introduction of the OEM Module – although we think there could be upside related to this.

Management's Most Recent 2018 Full-Year Guidance

- Total FORE-SIGHT revenue: Mid-teens percentage growth
  - U.S. FORE-SIGHT: Mid-teens percentage growth
    - U.S. Sensors: mid-teens percentage growth
  - International FORE-SIGHT: low single-digit % growth (revised up from high single digit % growth)

Valuation

We value CASM using comparable EV/S and P/S ratios of other publicly traded companies in the tissue oximeter, patient monitoring and cardiac surgery industries including direct competitors Masimo Corporation (MASI) and Medtronic (MDT). As the other tissue oximetry competitors are not publicly traded, we have rounded out our comparable cohort with companies which have similar exposure to CASM's end markets including Brainsway (BRSYF), a manufacturer non-invasive brain stimulation devices and Natus Medical (BABY), which makes monitoring and detection devices for neonatal neurological disorders.

Average of EV/S and P/S value CASM at approximately $4.50/share, indicating the market is substantially undervaluing the stock.

	Sales Estimate (M)							
	2018	**2019**	**EV**	**EV/2018**	**EV/2019**	**MC**	**P/S '18**	**P/S '19**
BABY	$530	$547	$1,240	2.3	2.3	$1,210	2.3	2.2
MASI	$851	$899	$4,780	5.6	5.3	$5,650	6.6	6.3
BRSYF	$9	$12	$80	9.3	6.7	$84	9.8	7.0
MDT	$30,600	$31,960	$133,990	4.4	4.2	$122,530	4.0	3.8
Avg.				**5.4**	**4.6**		**5.7**	**4.8**

CASM Valuation Based On:					
Comparable EV/Sales			**Comparable Price/Sales**		
	EV	**Implied Share Value**		**MC**	**Implied Share Value**
2018 S	$115	$4.63	2018 S	$121	$4.47
2019 S	$110	$4.46	2019 S	$116	$4.28
Average		**$4.54**	**Average**		**$4.38**

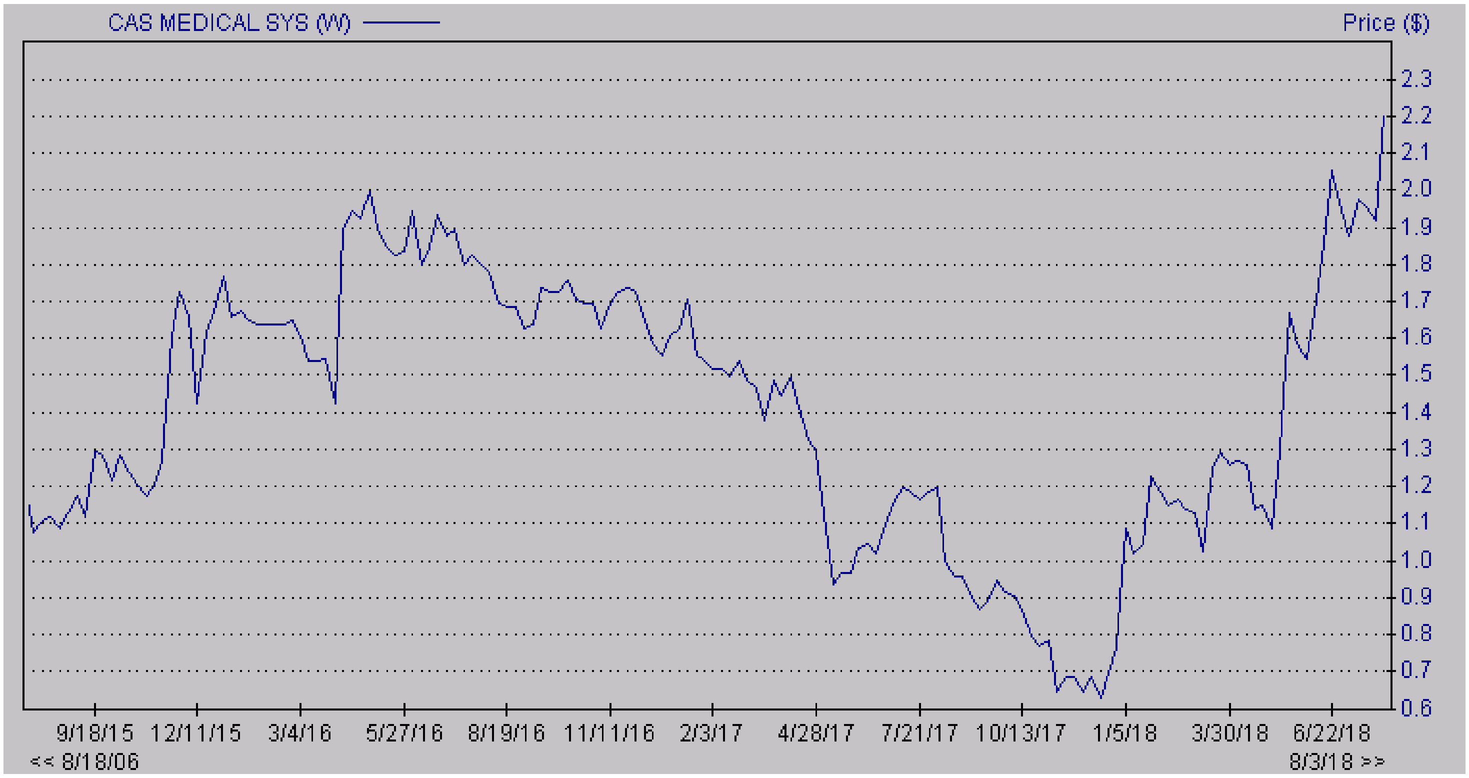
FINANCIAL MODEL

CAS Medical Systems Inc. (figures in 000s of $)

	2017 A	Q1 A	Q2 A	Q3 E	Q4 E	2018 E	2019 E	2020 E
FORE-SIGHT Sensors	$16,373.0	$4,727.0	$4,680.0	$4,632.3	$4,785.4	$18,824.8	$21,541.9	$24,244.4
yoy growth	3.1%	17.7%	13.4%	18.7%	10.5%	15.0%	14.4%	12.5%
% of total oximetry sales	90.3%	89.0%	90.8%	90.6%	90.6%	90.3%	92.0%	92.0%
FORE-SIGHT Monitors & Access.	$1,751.0	$585.0	$472.0	$478.8	$495.9	$2,031.7	$1,877.1	$2,102.4
yoy growth	-17.6%	82.2%	75.5%	1.2%	-27.9%	16.0%	-7.6%	12.0%
% of total oximetry sales	9.7%	11.0%	9.2%	9.4%	9.4%	9.7%	8.0%	8.0%
Tissue Oximetry Total Sales	$18,124.0	$5,312.0	$5,152.0	$5,111.1	$5,281.3	$20,856.5	$23,419.0	$26,346.8
yoy growth	0.6%	22.5%	17.2%	16.8%	5.3%	15.1%	12.3%	12.5%
% of total revenue	96.6%	97.6%	97.4%	97.8%	98.1%	97.7%	97.8%	98.1%
Service & Other	$655.5	$132.0	$139.0	$114.8	$103.3	$489.0	$528.1	$517.6
yoy growth	-1.7%	-35.9%	-21.5%	-24.0%	-15.0%	1.0%	8.0%	-2.0%
% of total revenue	3.5%	2.4%	2.6%	2.2%	1.9%	2.3%	2.2%	1.9%
Total Revenues	$18,763.1	$5,444.5	$5,291.2	$5,225.9	$5,384.6	$21,346.1	$23,947.1	$26,864.4
YOY Growth	0.5%	19.8%	15.7%	15.5%	5.1%	13.8%	12.2%	12.2%
Cost of Revenues	$8,505.01	$2,357.7	$2,110.6	$2,132.2	$2,234.6	$8,835.1	$9,698.6	$10,638.3
Gross Income	$10,258.1	$3,086.7	$3,180.6	$3,093.7	$3,150.0	$12,511.0	$14,248.5	$16,226.1
Gross Margin	54.7%	56.7%	60.1%	59.2%	58.5%	58.6%	59.5%	60.4%
R&D	$3,234.1	$801.6	$833.7	$857.0	$855.0	$3,347.3	$3,338.0	$3,221.0
% R&D	17.2%	14.7%	15.8%	16.4%	15.9%	15.7%	13.9%	12.0%
SG&A	$13,418.3	$3,431.4	$3,473.0	$3,443.9	$3,456.9	$13,805.2	$14,320.4	$15,044.0
% SG&A	71.5%	63.0%	65.6%	65.9%	64.2%	64.7%	59.8%	56.0%
Operating Income	($6,394.3)	($1,146.3)	($1,126.1)	($1,207.1)	($1,161.9)	($4,641.5)	($3,409.8)	($2,039.0)
Operating Margin	-34.1%	-21.1%	-21.3%	-23.1%	-21.6%	-21.7%	-14.2%	-7.6%
Interest Income, net	($1,076.9)	($271.5)	($589.1)	($244.8)	($232.3)	($1,337.7)	($921.3)	($665.8)
Other income	$0.5	$0.0	$0.0	$0.0	$0.0	$0.0	$12.0	$14.0
Pre-Tax Income	($7,470.7)	($1,417.8)	($1,715.2)	($1,452.0)	($1,394.2)	($5,979.2)	($4,319.1)	($2,690.8)
Taxes	($1,745.4)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	23.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred Dividends	$1,589.1	$414.8	$422.0	$429.0	$436.0	$1,701.8	$910.0	$0.0
Net Income (cont ops)	($7,314.4)	($1,832.7)	($2,137.2)	($1,881.0)	($1,830.2)	($7,681.0)	($5,229.1)	($2,690.8)
YOY Growth	-0.7%	-24.3%	-17.5%	455.3%	-6.7%	5.0%	-31.9%	-48.5%

Net Margin	-	-	-	-	-	-	-21.8%	-10.0%
EPS (cont ops)	($0.27)	($0.07)	($0.08)	($0.07)	($0.07)	($0.27)	($0.16)	($0.07)
YOY Growth	-2.3%	-25.9%	-18.8%	428.5%	-8.9%	2.2%	-42.6%	-55.0%
Diluted Shares O/S	27,261	27,612	27,750	28,720	28,000	28,020	33,250	38,000

HISTORICAL STOCK CHART



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