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Zacks Small-Cap Research

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Zecotek Photonics (V.ZMS)

V.ZMS: Production-based Progress Appears To Be Accelerating, And May Be Turning Into Orders and Revenue

We model revenue to grow from $440k in 2018 to about $38M in 2025. Our DCF model, which uses an 8% discount rate and 2% terminal growth rate, values the shares at approximately $0.75.

Current Price (10/30/2018)	$0.13
Valuation	**$0.75**

OUTLOOK

Hopefully our comments in July were at least somewhat prescient as since then ZMS announced two new orders worth $475k and also indicated that fulfillment of orders from legacy customers is in the works. While we have not been particularly excited about the lack of obvious correlation between seemingly significant operational progress and what has shown up on the revenue line in the income statement, we are hopeful that the not-insignificant outside (private) equity capital that has materialized over the last few quarters is indicative of behind-the-scenes progress. Management recently announced that they intend to undergo a strategic review of the company with the goal of maximizing shareholder value. Our belief is that order fulfillment could go a long way towards reviving the value that the capital markets is assigning to ZMS common shares. However, we recognize that delays are often out of the direct control of the company and that a 'strategic review' might make sense if order flow and substantive fulfillment may not materialize for some time. Importantly the company's September 24th press release announcing the potential strategic review notes that an equity raise is not under consideration and that there is no need to do so.

SUMMARY DATA

52-Week High	**$0.35**
52-Week Low	**$0.12**
One-Year Return (%)	**-48**
Beta	**-46.00**
Average Daily Volume (sh)	**106,268**
Shares Outstanding (mil)	**165**
Market Capitalization ($mil)	**21**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**N/A**
Insider Ownership (%)	**N/A**
Annual Cash Dividend	**N/A**
Dividend Yield (%)	**N/A**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
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	**N/A**
Type of Stock	**Small-Growth**
Industry	**Med Products**

ZACKS ESTIMATES

Revenue
(in '000 of $)

	Q1 (Oct)	Q2 (Jan)	Q3 (Apr)	Q4 (Jul)	Year (Jul)
2017	208 A	6 A	212 A	42 A	467 A
2018	189 A	8 A	4 A	239 E	440 E
2019					4863 E
2020					11030 E

Earnings per Share

	Q1 (Oct)	Q2 (Jan)	Q3 (Apr)	Q4 (Jul)	Year (Jul)
2017	-$0.01 A	$0.00 A	-$0.01 A	-$0.01 A	-$0.02 E
2018	-$0.00 A	-$0.01 A	-$0.01 A	-$0.01 E	-$0.03 E
2019					-$0.03 E
2020					-$0.02 E

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

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Production-based Progress Appears To Be Accelerating, And May Be Turning Into Orders and Revenue…

As we indicated in our update in July, the disconnect between descriptive progress in press releases and financial performance has been disappointing and confusing. More specifically, we addressed the lack of substantive revenue despite announcements of various meaningfully-sized LFS crystals orders since May of last year. We opined then that while we did not have any particular insight into why that was the case, that one suggestion was that there was a need for ZMS to own their own manufacturing – with potentially several reasons why that was required. Including that customers and prospective customers wanted assurance of quality control, capacity and chain-of-custody. Another is that owned-manufacturing would provide ZMS with greater control over processes, protection of IP and pricing.

We also mentioned that, if proprietary manufacturing was indeed the reason (or the main reason) why these 'orders' didn't turn into actual orders then we were hopeful that the income statement will begin to show much closer correlation to the relative positivity of the news flow. That's because, since earlier this year, Zecotek PR'd numerous announcements relating to building-out, opening and commencing operations of their own manufacturing operation in Shanghai. That included an early-August release announcing the grand opening of the facility and that expansion of the facility would correlate with expected increase in demand through the end of this year and into 2019.

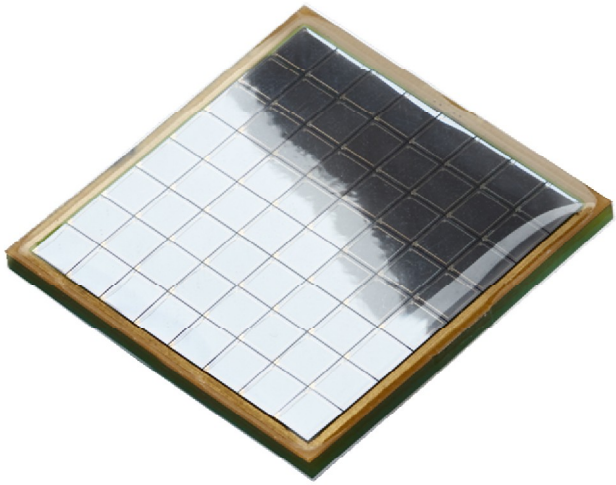
New order flow and fulfillment, expected to increase as production facility scales…

Hopefully our comments in July were at least somewhat prescient as since then ZMS announced two new orders worth (in aggregate) $475k and also indicated that fulfillment of orders from legacy customers, such as EBO Optoelectronics and Hamamatsu, is in the works. Relative to the most recent orders, $225k worth of LFS crystals was announced on September 11th followed just two weeks later by an order for $250k of the crystals. Both relate to development or manufacture of a 'new line of PET medical scanners.'

As a reminder, previous orders or potential orders that ZMS has announced include a $100k order related to "tier 1" PET OEMs (announced May 2017), $1.2M of orders (mostly) from EBO (announced July 2017), potential orders worth up to an estimated $10M from a (unnamed) European PET OEM (announced October 2017) and a $5M order ("single largest P.O.") through a distribution partner in China (announced June 2018). And that's in addition to an agreement to supply EBO with "over $21M worth of scintillation crystals over the next three years" (announced January 2017), the MUO related to supplying LFS crystals for up to 200 PET scanners to an OEM in China (initially announced March 2016) and the still-outstanding ($1.25M worth of) orders from Hamamatsu.

Long-awaited MAPD/T…

Additionally, the long-awaited introduction and commercialization of production of ZMS' new-generation solid-state micro-pixel avalanche photo diodes and transistors (MAPD/T) may soon come to fruition. Earlier this month ZMS announced that manufacturing of their MAPD/T commenced at the Malaysian Institute of Microelectronics Systems (MIMOS), which bills itself as helping Malaysian "technopreneurs" develop patentable technology platforms and which has filed more than 2,000 'intellectual properties'. This new-generation solid state photo detector, per ZMS, has significant performance advantages over competing technologies and has been developed to reduce manufacturing cost.



Source: Zecotek

ZMS notes that while this is just the first phase, that they are already seeing demand for MAPD/T in various applications including for medical imaging (such as PET scanners) as well as for LIDAR (Light Detection and Ranging), one of the leading remote-sensing technologies used in aircraft as well as self-driving cars to measure distances. They also indicate that they are exploring other potential applications in various commercial sectors, including in agriculture and genomics.

Outside investment and strategic review…
While we have not been particularly excited about the lack of obvious correlation between seemingly significant operational progress and what has shown up on the revenue line in the income statement, we are hopeful that the not-insignificant outside (private) equity capital that has materialized over the last few quarters is indicative of behind-the-scenes progress. While we do not know this to be the case, presumably the entities that invested $5M (for a 6.7% stake) in Zecoteck Imaging China and $2M (for a 2% stake) in Zecotek Imaging Systems Pte. Ltd. did so only after a level of due diligence beyond what we can conduct as equity analysts.

Our point being that while our rough gauge of material operational progress is limited to what has shown up on the income statement, a better gauge would be deep due diligence such as site visits, channel checks, access to customer contracts and the like – all of which might be expected prerequisites to significant outside equity investments. As previously reported, these two investments value ZMS at, at-least, $75M and, depending on the valuation methodology, potentially well over $100M.

Management recently announced that they intend to undergo a strategic review of the company with the goal of maximizing shareholder value. Our belief is that order fulfillment could go a long way towards reviving the value that the capital markets is assigning to ZMS' common shares. However, we recognize that delays are often out of the direct control of the company and that a 'strategic review' might make sense if order flow and substantive fulfillment may not materialize for some time. Importantly the company's September 24th press release announcing the potential strategic review notes that an equity raise is not under consideration and that there is no need to do so.

Outlook

If lack of owned-manufacturing was indeed the hurdle that ZMS needed to clear before they could begin to fill the various multi-million dollar LFS crystals orders, then the news flow over the last several months has us hopeful that the company's historic inability to translate operational progress into revenue growth may soon be coming to an end. Proof will be on the income statement and, with fulfillment of substantive orders expected to have already begun and grow throughout the remainder of calendar 2018, we would expect to see meaningful revenue generation by the end of fiscal Q1 2019 (October 31, 2018) and for annualized revenue to reach a minimum of $2M by Q2 2019.

The recent news that a major European PET/CT OEM adopted the company's LFS crystals for a new line of scanners is particularly exciting for a couple of reasons. First, Europe is a more seamless market to work in as compared to China. Secondly, we think European PET OEM could be Philips – and if that is the case, the supply agreement could be related to the terms of the lawsuit settlement – which would suggest binding contract terms. And in addition, ZMS indicated (in Oct 2017) that they think this relationship could be worth in excess of $10M in revenue per year to the company. While our model includes assumed contribution from this relationship, we will not model anywhere near $10M annually unless and until there is more substantive information about the binding nature of the agreement or until there is a reasonable history of meaningful sales to this channel. This is one of the relationship which we are most eager to hear updates about.

The Chinese PET OEM relationship could be home run but we think it is prudent to forego modeling any significant related contribution until, at least, the MOU turns into a formal contract (if it ever does). And if it reaches that point and with additional clarity on potential scheduling of follow-on orders, there may be an opportunity to make an informed estimate related to potential future sales through this channel.

The recent $5M (6.7%) equity investment in ZIC and $2M (2%) equity investment in ZIS by an industrial business group based in China (which might be SCI, possibly, EBO) should provide a sizeable backstop in facilitating initial meaningful sales in China. But, benefits of this partnership could extend well-beyond the new operating capital. Partnering with a China-domiciled organization not only brings expertise and knowledge of the local business environment, it also presumably provides for greater efficiencies (as well as potentially addressing any legal mandates related to foreign companies doing business in China).

Despite the ongoing delays to order fulfillment and revenue generation, we view the establishment of Zecotek China and initial crystals orders as substantive progress towards entry into the Chinese market. The recent hiring of an experienced (and native) director of business development is also encouraging as it relates to the potential of this segment to gain traction. As such and given that we have yet to incorporate meaningful revenue related to these relationships, our model could prove highly conservative. We will be eagerly awaiting updates on progress of order fulfillment and capacity expansion of the production facility.

And ZMS could see additional interest for their LFS crystals from manufacturers of small and next-gen Time-of-Flight PET scanners as well as in applications such as pre-clinical pharmaceutical research for drug development. The recent LFS order from a U.S. neuroPET manufacturer is a clear positive, although time will tell if this relationship bears significant fruit. Israel, via ZMS's distribution agreement with RAM N.S. Technologies, adds another potential near-term shot on goal. And while a formal supply relationship with Philips has yet to be penned, that possibility remains open and, if it happens, could be a needle-mover for ZMS.

And other recent revenue opportunities could be in homeland security, radiation detection and (as it relates to the Display segment) in 3D HUD. The agreements to develop a radiation detection unit with a radiation safety and homeland security OEM as well as the partnerships major European auto manufacturers in the development of a 3D HUD system sounds encouraging – although, as noted, the potential revenue opportunities related to both of these is currently unclear. Consummation of the outside equity investments in ZIC and ZIS may be a harbinger for a similar deal for Zecotek Display Systems – which would be used to complete integration of their 3D technology for automotive applications – and could result in another future revenue stream.

Revenue forecast…

We model fiscal 2018 revenue of $440k and expect much more meaningful revenue from crystals shipments by early fiscal 2019 and for that to show consistent and meaningful qoq growth. We look for revenue to grow to $4.9M (revised down from $6.4M) in 2019 and to $11.0M (revised down from $14.8M) in 2020.

But, as noted, we have not incorporated contribution related to supplying crystals to the China PET OEM contract and are modeling only a fraction of the (indicated) $10M+ annual sales potential related to the European PET OEM. If the China contract is triggered and/or European PET OEM crystals sales ramp faster than our assumptions, our model will likely prove conservative and possibly highly conservative, particularly in the out-years. Consummation of an equity investment in Display Systems could also positively influence our outlook and related projections.

ZMS.V shares valued at $0.75…

Our model is subject to updating. Model revisions could also affect our price target. As it is now, our DCF methodology calculates fair value of Zecotek at approximately $125M, equal to about $0.75/share. Based on the recent $2M investment for 2% interest in Imaging Systems, floor value is a minimum of $98M, or $0.59/share (which would conservatively assume the Optronics and Display segments are worthless).

FINANCIAL MODEL

Zecotek Photonics Inc.

	2017 A	Q1 A	Q2 A	Q3 A	Q4 E	2018 E	2019 E	2020 E
Total Revenues	$466.9	$189.3	$8.3	$3.6	$238.7	$439.8	$4,862.7	$11,030.3
YOY Growth	-68.6%	-8.8%	37.0%	-98.3%	474.1%	-5.8%	#DIV/0!	126.8%
Cost of Goods Sold	$406.4	$230.0	$8.7	$4.0	$214.8	$457.6	$3,331.0	$6,110.8
Gross Income	$60.5	($40.7)	($0.5)	($0.5)	$23.9	($17.8)	$1,531.8	$4,919.5
Gross Margin	13.0%	-21.5%	-5.8%	-12.9%	10.0%	-4.0%	31.5%	44.6%
SG&A	$3,628.5	$886.1	$1,726.6	$1,812.0	$946.2	$5,370.9	$5,893.6	$6,805.7
% SG&A	777.2%	468.1%	20910.4%	50856.7%	396.4%	1221.2%	121.2%	61.7%
R&D	$1,283.9	$98.8	$144.1	$230.3	$217.2	$690.4	$1,444.0	$1,623.0
% R&D	275.0%	52.2%	1744.7%	6463.5%	91.0%	157.0%	29.7%	14.7%
Operating Income	($4,851.9)	($1,025.6)	($1,871.1)	($2,042.8)	($1,139.5)	($6,079.1)	($5,805.9)	($3,509.2)
Operating Margin	-1039.2%	-541.8%	-22661.0%	-57333.1%	-477.4%	-1382.2%	-119.4%	-31.8%
Total Other Income (Expense)	$1,828.5	$540.0	$1,137.5	$0.0	$0.0	$1,677.5	$0.0	$0.0
Pre-Tax Income	($3,023.4)	($485.6)	($733.7)	($2,042.8)	($1,139.5)	($4,401.6)	($5,805.9)	($3,509.2)
Tax expense (benefit)	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income	($3,023.4)	($485.6)	($733.7)	($2,042.8)	($1,139.5)	($4,401.6)	($5,805.9)	($3,509.2)
YOY Growth	-43.4%	-54.7%	-305.2%	43.1%	29.4%	-100.0%	#DIV/0!	-39.6%
Net Margin	-647.6%	-256.5%	-8885.2%	-57333.1%	-477.4%	-1000.8%	-119.4%	-31.8%
EPS	($0.02)	($0.00)	($0.01)	($0.01)	($0.01)	($0.03)	($0.03)	($0.02)
YOY Growth	-49.3%	-58.8%	-283.5%	18.7%	7.6%	25.8%	-99.7%	-43.1%
Diluted Shares O/S	131,092	139,748	143,555	159,669	164,000	151,743	175,000	186,000

Brian Marckx, CFA

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STOCK CHART



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