

# Zacks Small-Cap Research

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## O2Micro International Ltd (NASDAQ: OIIM)

### Q2Micro Closes 2021 With Demand Out Stripping Supply

Using an industry average value to trailing 12-month sales of 8.8 times and OIIM's \$101 m trailing 12-month revenue, we would calculate an enterprise value of \$890 million, a market cap of \$940 million and a price of approximately **\$30.00 per share**.

Current Price (01/26/22) \$3.72  
Valuation **\$30.00**

### OUTLOOK

O<sub>2</sub>Micro 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, appliances and ebikes. It is profitable, growing, and generated a 2021 EBITDA margin of 18.2%, and trades at an **enterprise value of \$65 million-- well below its peers**. The surge in demand for high end TVs and battery-operated devices is accelerating its growth and producing higher margins with only customer and supplier woes currently throttling sales.

### SUMMARY DATA

52-Week High \$10.60  
52-Week Low \$3.72  
One-Year Return (%) -58.7  
Beta 0.7  
Average Daily Volume (sh) 234,644

ADS Outstanding (mil) 28.5  
Market Capitalization (\$mil) \$106  
Short Interest Ratio (days) 0.7  
Institutional Ownership (%) 48  
Insider Ownership (%) 8

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

5-Yr. Historical Growth Rates  
Sales (%) 9.8  
Earnings Per Share (%) N/A  
Dividend (%) N/A

P/E using TTM EPS 8.3  
P/E using 2022 Estimate 7.3  
P/E using 2023 Estimate 6.3

Risk Level Above Average  
Type of Stock Small-Value  
Industry Elec Comp-Semis

### ZACKS ESTIMATES

#### Revenue

(in millions of \$)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2020	15.6 A	17.3 A	22.2 A	23.2 A	78 A
2021	23.2 A	26.2 A	27.3 A	24.4 A	101 A
2022	21.0 E	24.0 E	28.0 E	35.0 E	108 E
2023					121 E

#### Earnings Per ADS

(Non-GAAP EPS before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2020	-\$0.00 A	\$0.03 A	\$0.12 A	\$0.13 A	\$0.29 A
2021	\$0.09 A	\$0.12 A	\$0.13 A	\$0.11 A	\$0.45 A
2022	\$0.02 E	\$0.07 E	\$0.14 E	\$0.26 E	\$0.51 E
2023					\$0.59 E

Zacks Projected EPS Growth Rate - Next 5 Years % **15**

## WHAT'S NEW

### Q4 Revenues Were Hurt By Now-Resolved Production Issues for Wafers

Q4 presented a new issue for O2Micro that occurred in the later part of the quarter. Due to production problems at its wafer supplier, O2Micro got its wafers late and supply will be affected from now until Q3 for its backlighting products and volume ramps. The company can sell all the product it can get, but for backlighting this is being gated until the company gets back to a steady state supply. Mitigating this issue somewhat is that O2Micro is bringing on a new supplier and new lines in Q2. However, it is expected to take until Q3 until it fully ramps and the company gets as much product as it needs. On the other hand, battery management has what it needs, but it suffering slightly short term by an overstock of inventory at its customers as it enters into its seasonally weak Q1. As spring approaches, demand picks up for garden tools, construction equipment, and ebikes. Vacuums and ebikes are the biggest drivers in the next couple quarters. The company continues to be optimistic about the future as batteries continue to power more and bigger devices. These will need more sophisticated and better safety protection and battery management systems and better integration with CPUs. O2Micro's solutions shorten the customer's design cycle, and provide systematic module software that better make use of its highly accurate AD converter,

Intelligent lighting continues its design wins in new technologies such as full array local dimming control (FALD). 8K TVs need more FALD zones to highlight the fine pixel of LCD screens. It cites the SonyXBR-85Z8H (MSRP \$9000) 85 inch 8K TV as an example. It comes with thousands of FALD zones. The 8K TV market is expected to grow 21% per year. O2Micro's multi-scan technology reduces motion blur effect, which is important to mini-LED technology and it should also benefit from growth of that technology being used in TVs, monitors and devices. O2Micro took market share in high-end monitors.

We believe margins should continue to expand as the company focuses on higher margin and high-performance proprietary analog IC. Its 2021 investment in its automotive grade ISO26262 SGS quality program, qualification of second source foundries, and expansion of its packaging and test ability to ensure delivery on time should yield improvements in 2022 and beyond.

In Q4 2021, revenue was \$24.4 million, down sequentially from \$27.3 million in Q4 due to the wafer issue, but up 5% from a year ago. Revenue had been growing sequentially since Q1 of 2020, all through the pandemic.

Battery management (industrial), the biggest contributor and highest grower, had revenues only increase approximately 19% year over year in Q4 compared to increasing 54% in Q3 and 104% in Q2 2021. Backlighting declined due to the production issues (consumer).

Approximate revenues by end market:

	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
<b>Revenues</b>	<b>\$15.6</b>	<b>\$17.3</b>	<b>\$22.2</b>	<b>\$23.2</b>	<b>\$23.2</b>	<b>\$26.2</b>	<b>\$27.3</b>	<b>\$24.4</b>
Consumer	7.0	8.3	9.6	9.8	8.6	9.4	9.0	9.0
Computer	0.9	1.0	1.3	0.7	0.7	0.5	0.5	0.7
Industrial	7.6	8.0	11.3	12.5	14.2	16.2	17.5	14.9
Communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

For Q1 2022, O2Micro expects revenues between \$20 million and \$22 million or a midpoint of \$21 million, which would be a decline of 10% year over year with gross margins slightly higher. For 2022 we are reducing revenues to \$108 million with non GAAP ADSPS of \$0.51 resulting in a current 2022 PE of

7.6xs. This company trades at EV/2021 sales of 0.5 times. Fabless semiconductor peers are trading at 8.8 times EV/12 month trailing sales.

## Q4 Results

Revenues were \$24.4 million compared with \$23.2 million in Q4 2020, up 5%. For Q4, the gross margin was 54.3% compared to 51.3% a year ago due to product mix tilting to the higher margin battery management products. The company said to expect the Q1 2022 gross margin to be in the range of 50-52% as the product mix moves back to a higher percent of backlighting and sales are lower.

Reported total operating expenses were \$10.6 million in the quarter compared to \$8.4 million a year ago and the same as in Q3 2021. The company went from 303 employees in Q4 2020 to 315 today. R&D expense increased to \$5.0 million up from \$3.9 million in 2020. SG&A was \$5.7 million up from \$4.4 million in Q4 2020. In 2021 O2Micro incurred additional expenses for: implementing a ISO26262 SGS quality program, 2<sup>nd</sup> source foundries qualification tape out, and expanding the packaging and test facilities supply chain to ensure on time delivery. The company expects these investments will lead to higher margins in 2022.

Operating income in Q4 was \$2.6 million versus \$3.7 million last year. Adding back depreciation and amortization (\$1.2 million) and stock-based compensation (\$558,000,) and adding the rental income, the adjusted **EBITDA looks to be \$4.5 million** (or 18.4%) compared to \$5.1 million in Q4 2020.

Total other income was \$395,000 versus \$920,000 last year. Last year included \$549,000 more in government grants as well as a \$133,000 unrealized gain on the company's holding in Excelliance MOS. In Q4 2020, O2Micro sold all of its remaining shares of Excelliance MOS stock.

The company reported a GAAP net income of \$2.8 million versus last year's \$4.4 million. This yielded a fully diluted GAAP EPS of \$0.09 versus \$0.14 a year ago. Non-GAAP income was \$3.4 million, versus \$4.0 million last year. This yielded a **non-GAAP EPS of \$0.11, versus \$0.13 last year**. ADS outstanding were 28.5 million and fully diluted they stood at 30.8 million compared with 30.7 million a year ago, up 1%.

## 2021 Year

Despite a year of supply chain challenges O2Micro grew rapidly and showed excellent profitability improvement showing the merits of a fabless model and operating leverage. In 2021, demand was not a problem, just supply. We expect that to continue in 2022. For the 2021 year, revenues were \$101 million up 29% from the \$78 million in 2020. Gross margins improved to 52.3% from 51.6%. Gross margin dollars increased to \$53 million from \$40 million. Operating expenses rose to \$41 million from \$34 million in 2020. This operating leverage led to an increase in operating margin from 9% to 12%. The tax rate declined to 7.4% from 13.3%. GAAP net income was \$12.1 million almost double the \$6.1 million in 2020. Non-GAAP net income was \$14 million compared to \$8.2 million, an increase of 84%. Diluted GAAP EPS was \$0.39 versus \$0.21. Non-GAAP it was \$0.45 per share compared with \$0.29 per share, increasing 58%. Fully diluted shares only increased 8%.

## Balance Sheet

On December 31, 2021, the company had \$50.0 million in cash and equivalents (or \$1.75 per ADS), down \$768,000 sequentially. Net cash generated by operating activities in the quarter was \$1.3 million compared to \$4.3 million in Q3 and \$3.6 million in Q2 2021. Capital expenditures were \$1.9 million compared to \$998,000 in Q3 2021 and \$3.5 million in Q2 2021. This yielded free cash flow of a negative \$600,000. Depreciation and amortization was \$1.2 million and EBITDA was \$4.5 million or 18.4% of sales. During the quarter the company repurchased 93,679 ADS units for \$482,000.

For the year net cash generated was \$10.3 million versus usage last year of \$1.4 million, EBITDA was \$18.4 million versus \$12.0 million in 2020. Cap Ex was \$8.8 million this year compared with only \$2.5 million last year. In 2022 that number is expected to be closer to \$4 million and the company should experience margin improvement from the cap ex spent in 2021.

### Revenue Percentages By Market

	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
Consumer	44-46	47-49	42-44	41-43	36-38	35-37	32-34	36-38
Computer	5-7	5-7	5-7	2-4	2-4	1-3	1-3	2-4
Industrial	48-50	45-47	50-52	53-55	60-62	61-63	63-65	60-62
Communications	0	0	0	0	0	0	0	0

During the quarter O2Micro announced three patent grants:

O2Micro announced it was issued 20 claims under GB Patent No. 2565006 on Sep 8, 2021, for the invention of a **battery protection system**, which includes a sensor, a primary protection circuit, coupled to the sensor, and a secondary protection circuit, coupled to the primary protection circuit and the sensor. The sensor is configured to generate a sense signal indicative of a temperature in a battery pack when the sensor is activated. The primary protection circuit is configured to generate a synchronizing signal in a first state or a second state, sample the sense signal when the synchronizing signal is in the first state, and provide a primary protection to the battery pack based on the sense signal. A secondary protection circuit is configured to be controlled by the synchronizing signal, sample the sense signal when the synchronizing signal is in the second state, and provide a secondary protection to the battery pack based on the sense signal. This invention provides a cost-effective solution to enhance the battery pack temperature related protections and reach higher function safety requirements.

On Dec. 16th it announced it was issued 20 claims under UK Patent No. GB 2544185 for the invention of **light-source systems and controllers**, which provide a sense signal indicative of the light-source current, detects a variation in a ripple amplitude of the output current by detecting a level of the indication signal, and controls a duty cycle of a switch so as to reduce an increasing rate of the ripple amplitude if the level of the indication signal increases, and to reduce a decreasing rate of the ripple amplitude if the level of the indication signal decreases. The invention provides **LED display** system applications with circuitry, and/or method, to obtain optimal LED current when there is an AC component present in the switching converter.

O2Micro also announced it had been issued 11 claims under Taiwan Patent No. I732536 on Jul 1st, 2021. This was for the invention of a **system for driving a light source including a power converter and control circuitry**. The control circuitry generates a control signal based on the voltage feedback signal indicative of a combination of the output voltage, current, and the light source and controls the power converter. This invention provides a cost-effective solution to the system power management where both regulated DC output and LED driver are present.

## VALUATION

### Company Has Significant Upside As Operating Margins Improve

The company trades at a fully diluted **enterprise value of \$65 million**, is profitable, and is generating cash. At the end of Q4 2021, the company had \$50 million (or \$1.75 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 easily worth more than \$10 million. Plus it also owns other real estate in China and Taiwan.

Comparable valuations have come down significantly since our last report. Were we to use the current average enterprise value to trailing twelve-month sales of 8.8 times and apply it to OIIM's trailing 12-month \$101.1 million revenues, we would calculate an enterprise value of \$890 million. Adding to it \$50 million in cash and equivalents gives us a market cap of \$940 million or **\$30.64 per share** using fully diluted shares.

	Competitors	EV	TTM Sales	EV/Sales
Monolithic Power Systems	<b>MPWR</b>	16,547	1,100	15.0
Microchip Technology	<b>MCHP</b>	48,230	6,040	8.0
Texas Instruments	<b>TXN</b>	158,617	17,590	9.0
Cirrus Logic	<b>CRUS</b>	4,536	1,520	3.0
	<b>Average</b>			8.8

As it is now generating profits, we can also look at the stock on a PE basis. It currently trades at 7.3 times 2022 estimated EPS and we expect 14% EPS growth from 2021 to 2022 or a PE to growth of 0.5 times. Even on an EBITDA basis it is undervalued. In 2021 year it generated an EBITDA of \$18.4 million. At 10xs EBITDA its market value would be \$230 million.

Looking at O2 Micro from an M&A prospective we can look at other fabless semiconductor transactions.

On August 26<sup>th</sup>, Analog Devices closed the acquisition of Maxim Integrated Products for an enterprise value of \$68 billion. With trailing revenues of \$2.63 billion that is a multiple of 25.9 times.

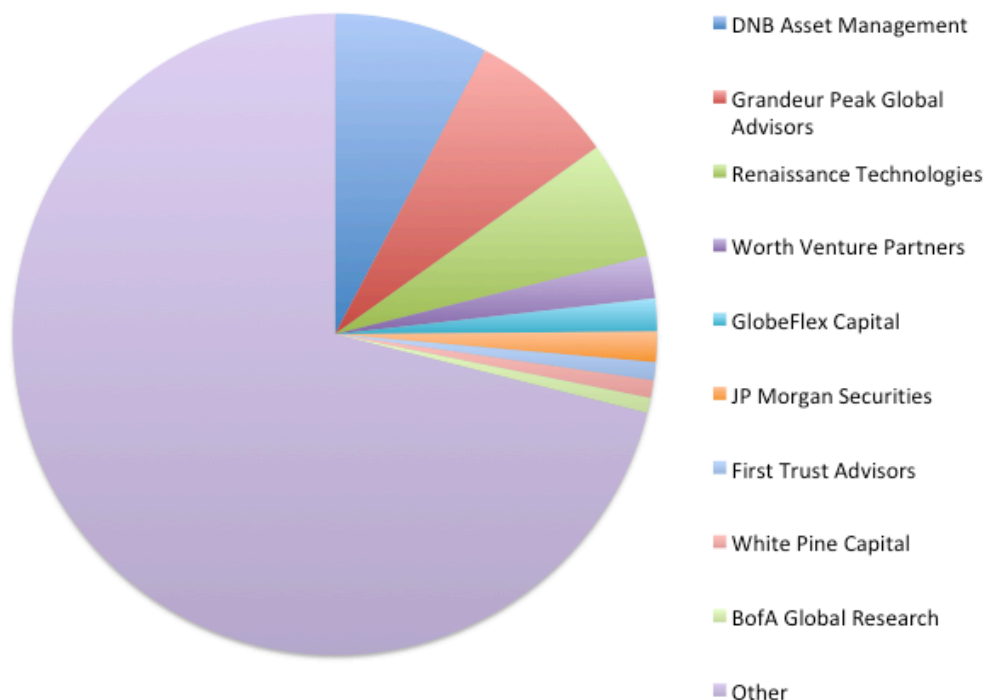
On February 8, 2021, Japan's Renesas Electronics bought Dialog Semiconductor for €4.9 billion (\$5.9 billion) in cash. In its last 12 months it generated \$1.4 billion in sales making that 4.2 times sales. Last year Dialog bought Adesto for \$500 enterprise value when it was expected to report FY2019 sales of \$118 million, also at 4.2 times sales.

AMD plans to buy Xilinx for [\\$35 billion](#) in stock. In its most recent four quarters it did \$3.47 billion in sales making this 10.1 times sales.

In May 2018, Microchip Technology bought Microsemi for \$10.15 billion, which was a valuation of 5.5 times its trailing twelve-month revenues of \$1.845 billion. Two other 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 was 9.9 times its trailing four quarters of revenue of \$1.5 billion.

## OWNERSHIP

As of December 31, 2020, the aggregate number of ordinary shares beneficially owned by directors and management was 269,445,850 (5,388,917 ADS). This number includes options to purchase 94,339,350 ordinary shares (1,886,787 ADS) under the 2005 Share Option Plan and 2015 Share Incentive Plan exercisable within 60 days of December 31, 2020. The company has not yet filed its December 31, 2021 data.



## RISKS

- O<sub>2</sub>Micro has high exposure to the global demand for TVs, particularly those sold in China. It is dependent on free dimming and high power LED lighting, 4K and 8K and other high end TVs and monitors, lithium ion battery powered tools and appliances, and IoT to give it revenue and margin growth.
- In 2020, two customers accounted for 25% of revenues and their loss could cause a meaningful decline in revenues. 90% of revenues were from China.
- The company is still somewhat affected by the proliferation of the coronavirus in China as their production and most of their customers are located in China and sell to the Chinese market. As China opens and closes for business O2Micro affected by supply chain issues as well as other issues such as electrical blackouts both inhibiting production and delivery.
- Recently the company had also been affected by business shutdowns in Malaysia and Viet Nam due to the pandemic where it has TV manufacturer customers.
- There are chip shortages in throughout the industry, which could affect O2Micro's customers' ability to complete building products, which could suppress orders for O2Micro's products.
- Given its large number of patents, litigation risk is a possibility as the company enforces its patents.

# INCOME STATEMENT

	March Q1 20	June Q2 20	Sept Q3 20	Dec Q4 20	March Q1 21	June Q2 21	Sept Q3 21	Dec Q4 21	March Q1 22E	June Q2 22E	Sept Q3 22E	Dec Q4 22E	2020	2021	2022E	2023E
<b>REVENUE</b>																
Net Revenue	15.6	17.3	22.2	23.2	23.2	26.2	27.3	24.4	21.0	24.0	28.0	35.0	78.3	101.1	108.0	121.0
Yr-to-yr Gr.	22%	21%	39%	30%	49%	52%	23%	5%	-10%	-8%	3%	44%	29%	29%	7%	12%
<b>OPERATING EXPENSES</b>																
Cost of goods sold	7.5	8.4	10.7	11.3	11.2	12.7	13.1	11.1	10.1	11.4	13.2	16.5	38.0	48.2	51.1	56.8
Gross Margin	8.1	8.9	11.5	11.9	12.0	13.5	14.2	13.2	10.9	12.6	14.8	18.6	40.4	52.9	56.9	64.2
% of Sales	51.9%	51.2%	51.8%	51.3%	51.6%	51.5%	52.0%	54.3%	52.0%	52.5%	53.0%	53.0%	51.6%	52.3%	52.7%	53.0%
R&D	4.1	4.1	4.1	3.9	4.6	4.7	5.1	5.0	5.5	5.5	5.5	5.5	16.2	19.4	20.0	21.5
SG&A	4.5	4.3	4.3	4.4	5.1	5.5	5.4	5.7	5.5	5.5	5.6	5.8	17.5	21.6	22.7	25.0
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.	8.7	8.4	8.4	8.3	9.6	10.2	10.6	10.6	11.0	11.0	11.1	11.3	33.7	41.0	42.7	46.5
<b>Operating Income</b>	(0.6)	0.5	3.1	3.7	2.4	3.3	3.6	2.6	(0.0)	1.6	3.7	7.3	6.7	11.9	14.2	17.7
Operating margin	-4%	3%	14%	16%	10%	13%	13%	11%	0%	7%	13%	21%	9%	12%	13%	15%
Interest income	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.5	0.2	0.3	0.3
Net gain recognized on LT investments	(1.1)	1.1	(0.2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	0.0	0.0
Foreign exchange loss	0.0	(0.1)	(0.1)	(0.1)	0.0	(0.1)	0.1	0.1	0.0	0.0	0.0	0.0	(0.2)	0.1	0.0	0.0
Gain on sale of real estate	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
Government grants	0.0	0.0	0.0	0.7	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.8	0.4	0.4	0.4
Other (rent) - net	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.5	0.4	0.4
One-time charge	0.0	(1.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(1.2)	0.0	0.0	0.0
Total other Income	(0.764)	0.2	0.1	0.9	0.4	0.1	0.3	0.4	0.3	0.2	0.3	0.3	0.4	1.2	1.1	1.1
<b>Pretax Income</b>	(1.3)	0.6	3.2	4.6	2.7	3.4	4.0	3.0	0.2	1.8	4.0	7.5	7.1	13.1	15.3	18.7
Pretax margin	-8.6%	3.7%	14.3%	19.7%	11.7%	13.0%	14.5%	12.3%	1.2%	7.6%	14.4%	21.5%	9.0%	12.9%	14.1%	15.5%
Taxes	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.9	1.0	1.0	1.2
Tax Rate	-15.4%	40.8%	8.0%	4.7%	9.0%	7.4%	7.1%	6.6%	100.4%	13.6%	6.2%	3.3%	13.3%	7.4%	6.5%	6.5%
<b>GAAP Net Income</b>	(1.5)	0.4	2.9	4.4	2.5	3.2	3.7	2.8	(0.0)	1.6	3.8	7.3	6.1	12.1	14.3	17.5
Non-GAAP Net Income	(0.0)	0.8	3.4	4.0	2.9	3.6	4.1	3.4	0.6	2.2	4.4	7.9	8.2	14.0	15.8	19.0
GAAP ADSPS-Basic	(\$0.06)	\$0.01	\$0.11	\$0.16	\$0.09	\$0.11	\$0.13	\$0.10	(\$0.00)	\$0.06	\$0.13	\$0.26	\$0.23	\$0.43	\$0.50	\$0.61
GAAP ADSPS-Fully dil.	(\$0.06)	\$0.01	\$0.10	\$0.14	\$0.08	\$0.10	\$0.12	\$0.09	(\$0.00)	\$0.05	\$0.12	\$0.24	\$0.21	\$0.39	\$0.46	\$0.57
<b>Non-GAAP</b>	<b>(\$0.00)</b>	<b>\$0.03</b>	<b>\$0.12</b>	<b>\$0.13</b>	<b>\$0.09</b>	<b>\$0.12</b>	<b>\$0.13</b>	<b>\$0.11</b>	<b>\$0.02</b>	<b>\$0.07</b>	<b>\$0.14</b>	<b>\$0.26</b>	<b>\$0.29</b>	<b>\$0.45</b>	<b>\$0.51</b>	<b>\$0.62</b>
Yr-to-yr Gr.	-99%	-135%	-677%	148%	-5813%	299%	12%	-16%	-79%	-39%	7%	133%	-255%	58%	14%	20%
ADS Out	26.7	27.0	27.0	27.2	28.0	28.4	28.5	28.5	28.5	28.5	28.5	28.5	27.0	28.4	28.5	28.5
Fully diluted ADS	26.7	27.7	28.9	30.7	31.4	31.1	31.0	30.8	30.8	30.8	30.8	30.8	28.7	31.1	30.8	30.8
Yr-to-yr Gr.	-1%	5%	10%	13%	18%	12%	7%	1%	-2%	-1%	-1%	0%	9%	8%	-1%	0%
Net cash generated	(4.52)	(1.40)	(1.10)	\$5.60	1.10	3.60	4.30	\$1.30	-	-	-	-	(1.42)	10.30		
EBITDA	\$0.45	\$1.83	\$4.63	\$5.10	\$3.87	\$4.76	\$5.26	\$4.49	\$1.86	\$3.53	\$5.63	\$9.14	\$12.01	18.38	\$21.43	\$24.88
Margin	2.9%	10.6%	20.8%	22.0%	16.7%	18.2%	19.3%	18.4%	8.9%	14.7%	20.1%	26.1%	15.3%	18.2%	19.8%	20.6%
Cap Ex	0.2	0.361	0.7	1.2	2.4	3.5	1.0	1.9	1.7	0.8	0.8	0.8	2.45	8.80	4.0	4.0

## BALANCE SHEET

	Dec 31, 2021	Sept 30, 2021	Qtr-to-Qtr % Change	Dec 31, 2020	Yr-to-Yr % Change
<b>CURRENT ASSETS</b>					
Cash and cash equivalents	\$20,780	\$22,073	-5.9%	\$18,752	10.8%
Restricted cash	39	38	2.6%	37	5.4%
Short-term investments	29,186	28,661	1.8%	29,054	0.5%
Accounts receivable, net	18,784	16,693	12.5%	16,430	14.3%
Inventories	19,523	18,001	8.5%	12,588	55.1%
Prepaid expenses and other current assets	2,087	3,423	-39.0%	2,548	-18.1%
<b>Total current assets</b>	<b>90,399</b>	<b>88,889</b>	<b>1.7%</b>	<b>79,409</b>	<b>13.8%</b>
 LONG-TERM INVESTMENTS	 992	 992	 0.0%	 992	 0.0%
PROPERTY AND EQUIPMENT, NET	23,611	22,407	5.4%	17,266	36.7%
OTHER ASSETS	3,340	3,858	-13.4%	4,369	-23.6%
Total other assets	27,943	27,257	2.5%	22,627	23.5%
<b>TOTAL ASSETS</b>	<b>118,342</b>	<b>116,146</b>	<b>1.9%</b>	<b>102,036</b>	<b>16.0%</b>
 <b>CURRENT LIABILITIES</b>					
Notes and accounts payable	9,175	10,295	-10.9%	7,995	14.8%
Income tax payable	307	376	-18.4%	272	12.9%
Lease liabilities	1,076	977	10.1%	865	24.4%
Accrued expenses and other current liabilities	5,773	5,355	7.8%	5,934	-2.7%
<b>Total current liabilities</b>	<b>16,331</b>	<b>17,003</b>	<b>-4.0%</b>	<b>15,066</b>	<b>8.4%</b>
 <b>OTHER LONG-TERM LIABILITIES</b>					
Accrued pension liabilities	147	144	2.1%	177	-16.9%
Deferred tax liabilities	537	690	-22.2%	545	-1.5%
Lease liabilities	1,775	1,965	-9.7%	2,091	-15.1%
Other liabilities	68	69	-1.4%	68	0.0%
<b>Total long-term liabilities</b>	<b>2,527</b>	<b>2,868</b>	<b>-11.9%</b>	<b>2,881</b>	<b>-12.3%</b>
<b>Total liabilities</b>	<b>18,858</b>	<b>19,871</b>	<b>-5.1%</b>	<b>17,947</b>	<b>5.1%</b>
 <b>SHAREHOLDERS EQUITY</b>					
Ordinary shares	33	33	0.0%	33	0.0%
Additional paid-in capital	143,540	142,974	0.4%	143,422	0.1%
Accumulated deficits	(35,158)	(37,951)	-7.4%	(46,744)	-24.8%
Accumulated other comprehensive income	5,873	5,777	1.7%	5,740	2.3%
Treasury stock	(14,804)	(14,558)	1.7%	(18,362)	-19.4%
<b>Total shareholders equity</b>	<b>99,484</b>	<b>96,275</b>	<b>3.3%</b>	<b>84,089</b>	<b>18.3%</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>	<b>118,342</b>	<b>116,146</b>	<b>1.9%</b>	<b>102,036</b>	<b>16.0%</b>
 Cash and equivalents	\$49,966	\$50,734	-1.5%	\$47,806	4.5%
Current Ratio	5.5	5.2	5.9%	5.3	5.0%
Quick Ratio	4.3	4.2	4.1%	4.4	-2.1%
Change in cash and equivalents	(768)	3,381	-122.7%	7,042	-110.9%
DSO	65	55	18.2%	64	1.6%
Inventory Days	152	117	29.9%	101	50.5%



## ANNUAL CASH FLOW

	2020	2019	2018	2017
<b>OPERATING ACTIVITIES</b>				
Net loss	\$ 6,127	\$ (5,039)	\$ 2,088	\$ (6,145)
<b>Adjustments to reconcile net loss to net cash used in operating activities:</b>				
Depreciation and amortization	3,225	1,780	1,641	1,667
Stock-based compensation	1,414	1,462	1,421	1,589
Other income - government grants	(817)			
Loss on asset write-off		0	0	0
Inventory write-downs	405	1,359	1,328	642
Net gain recognized on LT investments	79	(788)	(9,916)	0
Gain on sale of long-term investments	0	(500)	0	(20)
Impairment loss on long-term investments	0	0	0	0
Gain on disposal of property & eqt, net	(189)	2	(6)	(137)
Deferred income taxes	(5)	(133)	(155)	40
Other, net	0	0	0	0
<b>Changes in operating assets and liabilities:</b>				
Accounts receivable, net	(6,095)	1,053	(2,204)	(1,979)
Inventories	(4,197)	133	(2,286)	(697)
Prepaid expenses and other current assets	(1,276)	981	(1,031)	(139)
Deferred charges	(3,836)	(571)	(983)	(553)
Operating lease right of use assets	(169)	(1,477)	0	0
Notes and accounts payable	3,128	285	2,122	(1,869)
Income tax payable	(339)	198	72	161
Government grants	817			
Accrued expenses and other current liabilities	808	661	(105)	186
Operating lease liabilities	197	1,494	0	0
Accrued pension liabilities	(33)	(42)	(20)	13
Other liabilities	3	3	(1)	3
Net cash used in operating activities	(753)	861	(8,035)	(7,238)
<b>Acquisition of:</b>				
Short-term investments	(4,491)	(34,649)	(11,197)	(8,505)
Long-term investments	0	0	0	0
Property and equipment	(2,476)	(1,672)	(1,272)	(704)
<b>Decrease (increase) in:</b>				
Restricted assets	0	0	0	0
Restricted cash	0	0	0	0
Other assets	(47)	6	(12)	22
<b>Proceeds from:</b>				
Sale of short-term investments	11,418	4,953	22,540	12,635
Sale of long-term investments	3,124	7,061	2,582	0
Return of capital from LT investment	0	0	0	1,163
Sale of real estate	0	2,169	0	
Disposal of property and equipment	331	1	16	145
Net cash provided by investing activities	7,859	(22,131)	12,657	4,756
<b>FINANCING ACTIVITIES</b>				
Acquisition of treasury stock	(146)	(510)	(451)	(708)
<b>Proceeds from:</b>				
Exercise of stock options	476	7	10	29
Issuance of ordinary shares under the ESP Plan	77	109	86	84
Net cash used in financing activities	407	(394)	(355)	(595)
<b>EFFECTS OF CHANGES IN FOREIGN EX RATE</b>	545	(53)	(374)	268
<b>NET CHANGE IN CASH AND CASH EQUIV.</b>	8,058	(21,717)	3,893	(2,809)
<b>CASH &amp; CASH EQUIV. AT BEGINNING OF YR</b>	10,731	32,448	28,555	31,364
<b>CASH &amp; CASH EQUIVALENTS AT END OF YR</b>	18,789	10,731	32,448	28,555
<b>Cash paid for tax</b>	\$ 1,223	\$ 1,171	\$ 1,218	\$ 818
<b>Cash Flow</b>	10,239	(1,857)	(3,599)	(2,364)
<b>Free cash flow</b>	8,094	(3,528)	(4,855)	(3,068)

## HISTORICAL STOCK PRICE



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