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Zacks Small-Cap Research

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O2Micro International Ltd (OIIM-NASDAQ)

OIIM: Q2 On Target, Cash Breakeven Expected in Q4

Using an industry average value to trailing 12-month sales of 5.7 times and OIIM's $60.1 m trailing 12-month revenue, we would calculate an enterprise value of $343, a market cap of $383 m and a price of **$14.75 per share**, if the company could reach breakeven.

Current Price (07/31/18)	$1.85
Valuation	**$14.75**

OUTLOOK

O_2Micro 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 and appliances, and smartphones. It had had declining revenues, but has reported revenue growth in the two years. It has struggled to reach profitability and cash flow breakeven, but should reach cash flow breakeven in Q4. The company trades at an enterprise value of $8.1 million, well below the value of its non-cash assets.

SUMMARY DATA

52-Week High	**$2.01**
52-Week Low	**$1.33**
One-Year Return (%)	**-3.1**
Beta	**0.08**
Average Daily Volume (sh)	**19,030**
Shares Outstanding (mil)	**26**
Market Capitalization ($mil)	**$48**
Short Interest Ratio (days)	**N/A**
Institutional Ownership (%)	**42**
Insider Ownership (%)	**8**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**-5.5**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/M**
P/E using 2018 Estimate	**N/M**
P/E using 2019 Estimate	**N/M**

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)
2016	13.0 A	13.2 A	14.4 A	15.9 A	57 A
2017	15.0 A	14.5 A	15.5 A	15.2 A	60 A
2018	14.1 A	15.2 A	16.7 E	17.7 E	64 E
2019					70 E

Earnings Per Share
(non-GAAP EPS before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2016	-$0.08 A	-$0.06 A	-$0.04 A	$0.01 A	-$0.16 A
2017	-$0.04 A	-$0.04 A	-$0.04 A	-$0.06 A	-$0.18 A
2018	-$0.09 A	-$0.05 A	-$0.05 E	-$0.02 E	-$0.20 E
2019					-$0.03 E

Zacks Projected EPS Growth Rate - Next 5 Years % **8**

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WHAT'S NEW

Unusual R&D Expense in Q3 Pushes Cash Breakeven to Q4

O2Micro reported Q2 2018 revenues of $15.2 million, up 8% sequentially, and 5% year over year and within the range of guidance of up 2-10%. The company returned to growth after two down quarters. Guidance for revenue for the third quarter of 2018 is sequentially up 6-14% from Q2 2018. The midpoint in revenue guidance would result in revenues being up 8% from a year ago.

The first half of 2018 was virtually flat with the first half of 2017.

The company had projected cash breakeven at $15.5 - 17 million in quarterly revenues and profitability at $17-19 million, however Q3 will be unusual. Due to a push in getting out new battery management products it will be spending $5.0-5.5 million in the quarter on R&D rather than a typical $4.7 million. This will reduce the cash breakeven for Q3 to $17 - 19 million and profitability breakeven to $19 - 21 million. At midpoint guidance the quarter would come in at $16.7 million although the top end of the range is $17.6 million. Q4, which we are projecting at $17.5 million, would be a profitable quarter.

Gross margin was 52.1%, up sequentially from 51.2%, and year over year from 50.9%, due to higher revenues and product mix.

Operating expenses in the quarter were $9.7 million versus $8.9 million last year and $9.8 million in Q1 2018. Both SG&A and R&D increased versus last year.

Operating losses increased to $1.8 million in Q2 2018 from $1.6 million a year ago, due entirely to increased spending.

In the quarter the company had an unrealized gain of $3.1 million on a long-term investment. This gain was again from ownership of the stock of Excelliance MOS Corp. (5299.TWO) a private company that went public on January 23, 2018 and appreciated in price since the end of the March quarter. With the help of this gain, the company reported positive GAAP net income of $1.5 million versus a loss of $1.4 million last year. This yielded fully diluted GAAP EPS of $0.06 versus a loss of $0.06 a year ago.

Non-GAAP net income was a loss of $1.3 million versus a loss of $1.1 million last year. The company reported **non-GAAP EPS loss of $0.05 versus a loss of $0.04 last year**.

At June 30, 2018, the company had $40.8 million in cash and equivalents (or $1.57 per ADS), down $4.3 million sequentially. The company expects to be cash flow breakeven in Q4, but not for the full year.

Business Units

I**ntelligent lighting** is experiencing design win acceleration with its new backlighting product line and continues to see higher volumes ordered. The shortage of large panels for televisions ended, and there are only limited silicon shortages. The market for televisions continues to improve, especially at the high end where manufacturers make all their money. 8K televisions are starting to come to market and key OEMs are seeking to differentiate their other high-end products. In addition, O2Micro continues to add new backlighting customers in industrial and automotive markets. In general lighting there has been modest growth particularly in the company's free-dimming products.



Battery management is the company's second largest sector and fastest growing as the industry continues to move to lithium ion batteries. Customers selling products such as e-bikes, e-vehicles, and vacuums and UPS power supplies are making the business less cyclical than when most of the product went to power tools. The company is providing the industry with more cost effective products, as well as more complex patent protected products for high-end solutions. More customers are being attracted to its proprietary cell balancing methodology.

Power Products continue to expand its product line, increase its design wins, and serve a broader array of customers. It is growing after several years of declining revenue as smartphones and tablets offset weak notebooks. The laptop market has started to grow again and O2Micro is benefitting from this growth. In particular the market is interested in O2Micros fast charging solutions that result in less heat generation. It two products, a double charge design and an express charge for use in an A/C adapter that are now in preproduction. The company's products are now designed into between 6-8 smartphone manufacturers including BDK, Coolpad, HCT, and Coosea. It expects to begin shipping to a tier one customer in 2019.

VALUATION

Company Has Significant Upside If It Can End Cash Burn

The company trades at an **enterprise value of $8.1 million**. Last year the company looked as if it had turned the corner and was approaching profitability but panel shortages for TVs nixed that progress and the valuation of the company slipped again. Now it looks like these shortages have ended and business has been mostly normalized. At the end of Q2 2018, the company had $40.8 million (or $1.57 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 worth at least $7 million. Plus it also owns other real estate in China. Also on the balance sheet are long-term investments in other companies, including approximately 3.4 million shares or **$16 million (at today's price) in stock** in Excelliance MOS. The company has a very high liquidation as well as acquisition value. Activists had tried to encourage a transaction with an acquirer, but the company has no interest in a sale and due to restrictions, it is difficult to force one.

In May, 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.

Were we to use the average enterprise value to trailing twelve-month sales of 5.7 times and apply it to OIIM's trailing 12-month $60.1 million revenues, we would calculate an enterprise value of $343 million. Adding to it $40.8 million in cash gives us a market cap of $383 million or **$14.75 per share**. We believe that once the company shows sustainable revenue growth and cash breakeven, the market should afford it a valuation closer to this price. We expect cash flow breakeven in Q4.

	Competitors	EV	TTM Sales	EV/Sales
Monolithic Power Systems	**MPWR**	5,530	527	10.5
Cree Inc.	**CREE**	4,510	1,440	3.1
Microchip Technology	**MCHP**	22,830	3,980	5.7
Maxim	**MXIM**	15,730	2,450	6.4
Texas Instruments	**TXN**	110,330	15,350	7.2
Cirrus Logic	**CRUS**	2,210	1,530	1.4
	Average			5.7

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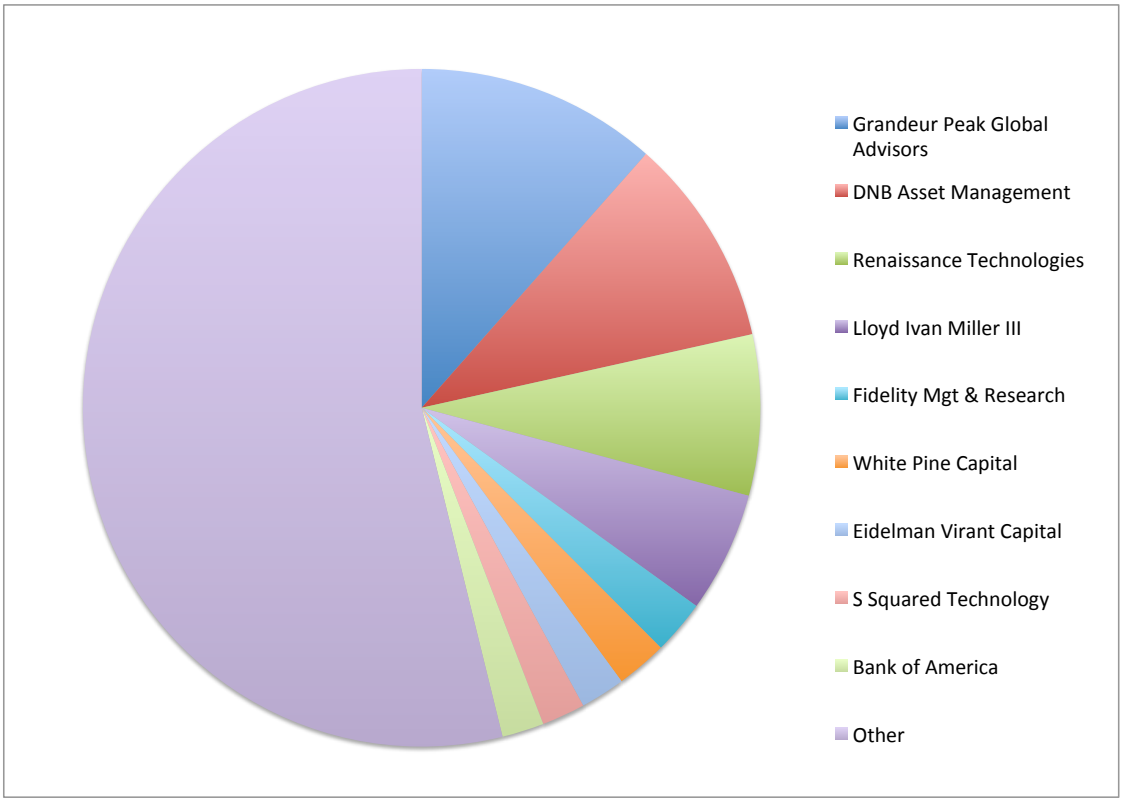


RISKS

- O_2Micro has exposure several stagnant markets such as standard TVs and declining markets such as notebooks and smaller monitors. It is depending on free dimming and high power LED lighting, 4K and 8K TVs, battery management, and successful penetration of and volume sales to the smartphone market to give it meaningful revenue and margin growth.

- It may be difficult for the company to capture market share in smartphones and tablets as a new entrant in an established field competing primarily with giant Texas Instruments and other larger firms.

- The firm is currently not at GAAP breakeven, is still cash flow negative, and has only started to stabilize revenues after years of declines.

- Given its large number of patents, litigation risk is a possibility as the company enforces its patents.

INCOME STATEMENT

	March Q1 17	June Q2 17	Sept Q3 17	Dec Q4 17	March Q1 18	June Q2 18	Sept Q3 18E	Dec Q4 18E	2016	2017	2018E	2019E
REVENUE												
Net Revenue	15.0	14.5	15.5	15.2	14.1	15.2	16.7	17.7	56.6	60.2	63.7	70.0
Yr-to-yr Gr.	15%	10%	7%	-4%	-6%	5%	8%	16%	3%	6%	6%	10%
OPERATING EXPENSES												
Cost of goods sold	7.1	7.1	7.7	7.5	6.9	7.3	8.2	8.6	27.3	29.4	31.0	33.0
Gross Margin	7.9	7.4	7.8	7.7	7.2	7.9	8.5	9.1	29.2	30.8	32.8	37.0
% of Sales	52.7%	50.9%	50.3%	50.5%	51.2%	52.1%	51.0%	51.4%	51.7%	51.1%	51.4%	52.9%
R&D	4.1	4.5	4.7	4.8	4.8	4.7	5.3	4.8	15.6	18.0	19.5	19.0
SG&A	5.1	4.4	4.9	4.7	5.0	5.0	5.0	5.0	19.5	19.0	20.0	20.0
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
Tot Operating Exp.	9.1	8.9	9.5	9.4	9.8	9.7	10.3	9.8	35.1	37.0	39.5	39.0
Operating Income	(1.2)	(1.6)	(1.7)	(1.8)	(2.5)	(1.8)	(1.7)	(0.7)	(5.9)	(6.2)	(6.7)	(2.0)
Interest income	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.5
Unrealized fair value on LT Investment	0.0	0.0	0.0	0.0	9.8	3.1	1.8	0.0	0.0	0.0	14.7	0.0
Foreign exchange loss	(0.2)	0.1	0.3	(0.0)	(0.2)	0.2	0.0	0.0	0.1	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	1.7	0.0	0.0	0.0
Other (rent) - net	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.9	0.7	0.6	0.5
Total other Income	0.0	0.4	0.6	0.2	10.0	3.6	2.0	0.2	3.9	1.1	15.8	0.9
Pretax Income	(1.2)	(1.2)	(1.1)	(1.6)	7.5	1.7	0.3	(0.4)	(1.9)	(5.1)	9.1	(1.1)
Pretax margin	-8.3%	-8.3%	-7.4%	-10.2%	52.8%	11.5%	1.9%	-2.3%	-3.4%	-8.5%	14.3%	-1.5%
Taxes	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	1.1	1.0	1.1	1.2
Tax Rate	-18.0%	-19.1%	-20.0%	-21.2%	3.6%	15.2%	80.0%	-72.6%	-54.9%	-19.7%	11.9%	-114.1%
GAAP Net Income	(1.5)	(1.4)	(1.4)	(1.9)	7.2	1.5	0.1	(0.7)	(3.0)	(6.1)	8.0	(2.3)
Non-GAAP Net Income	(1.0)	(1.1)	(1.0)	(1.5)	(2.2)	(1.3)	(1.4)	(0.4)	(4.4)	(4.6)	(5.3)	(0.7)
GAAP EPS-Basic	($0.06)	($0.06)	($0.05)	($0.07)	$0.28	$0.06	$0.00	($0.03)	($0.12)	($0.24)	$0.31	($0.09)
GAAP EPS-Fully dil.	($0.06)	($0.06)	($0.05)	($0.07)	$0.27	$0.06	$0.00	($0.03)	($0.12)	($0.24)	$0.31	($0.09)
Non-GAAP	**($0.04)**	**($0.04)**	**($0.04)**	**($0.06)**	**($0.08)**	**($0.05)**	**($0.05)**	**($0.02)**	**($0.16)**	**($0.18)**	**($0.20)**	**($0.03)**
Share Out	25.8	25.9	25.7	25.7	26.0	26.0	26.0	25.9	25.6	25.8	26.0	25.6
Fully diluted shares	25.8	25.9	25.7	25.7	26.5	26.5	26.4	25.9	25.6	25.8	26.5	25.6
Yr-to-yr Gr.	1%	1%	-1%	-1%	2%	2%	3%	1%	-1%	1%	3%	-3%

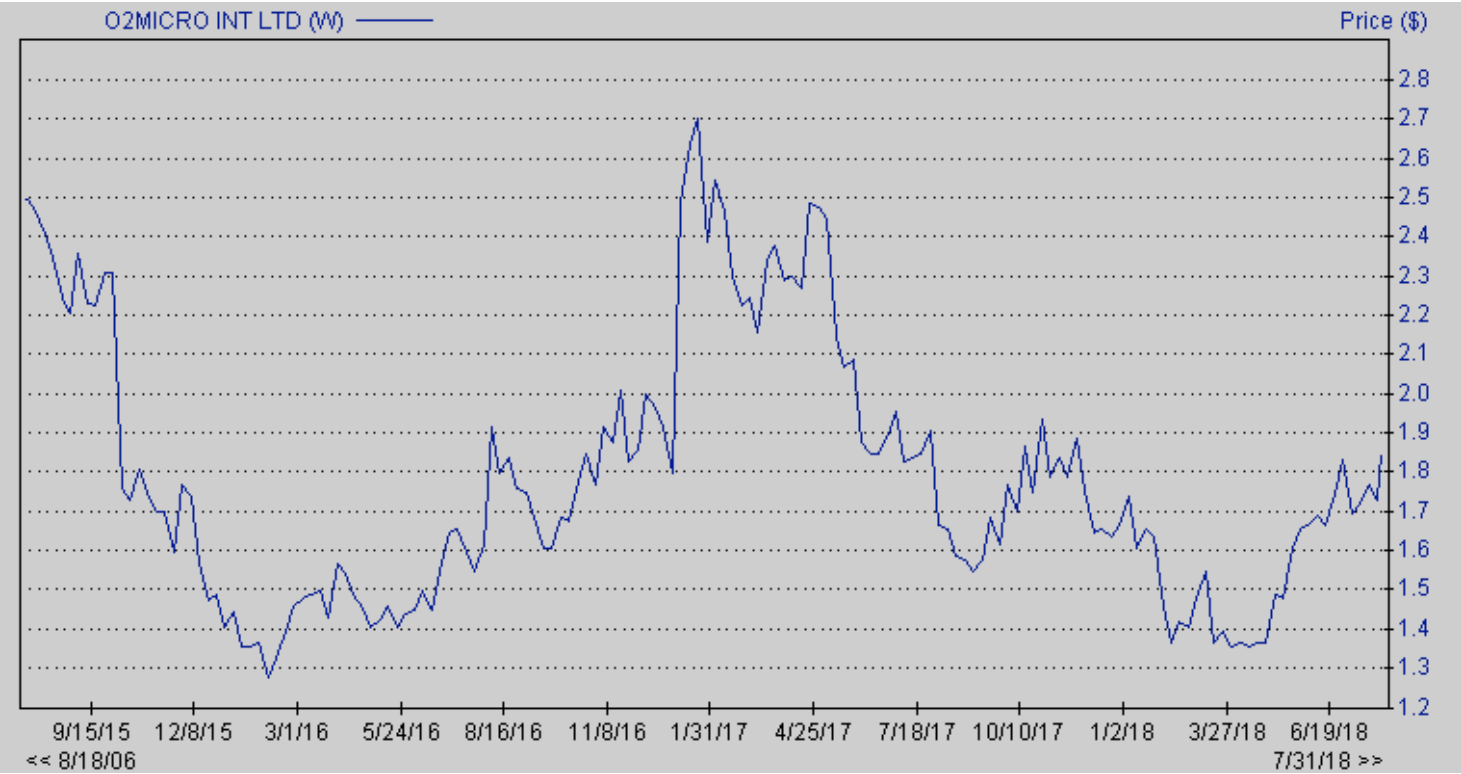
BALANCE SHEET

	June 30, 2018	March 31, 2018	Jun-Mar % Change	June 30, 2017	Yr-to-Yr % Change
CURRENT ASSETS					
Cash and cash equivalents	$23,576	$25,417	-7.2%	$28,850	-18.3%
Restricted cash	34	36	-5.6%	34	0.0%
Short-term investments	17,236	19,695	-12.5%	18,640	-7.5%
Accounts receivable, net	11,313	8,043	40.7%	8,815	28.3%
Inventories	9,990	9,662	3.4%	10,023	-0.3%
Prepaid expenses and other current assets	1,492	1,685	-11.5%	1,830	-18.5%
Total current assets	**63,641**	**64,538**	-1.4%	**68,192**	-6.7%
LONG-TERM INVESTMENTS	15,967	12,849	24.3%	4,245	276.1%
PROPERTY AND EQUIPMENT, NET	13,545	13,751	-1.5%	14,030	-3.5%
OTHER ASSETS	2,164	2,232	-3.0%	1,962	10.3%
Total other assets	31,676	28,832	9.9%	20,237	56.5%
TOTAL ASSETS	95,317	93,370	2.1%	88,429	7.8%
CURRENT LIABILITIES					
Notes and accounts payable	4,339	3,290	31.9%	4,132	5.0%
Income tax payable	271	292	-7.2%	274	-1.1%
Accrued expenses and other current liabilities	3,816	3,761	1.5%	3,495	9.2%
Total current liabilities	8,426	7,343	14.7%	7,901	6.6%
OTHER LONG-TERM LIABILITIES					
Accrued pension liabilities	338	358	-5.6%	291	16.2%
Deferred tax liabilities	1,092	1,012	7.9%	940	16.2%
Other liabilities	85	88	-3.4%	86	-1.2%
Total long-term liabilities	1,515	1,458	3.9%	1,317	15.0%
Total liabilities	9,941	8,801	13.0%	9,218	7.8%
SHAREHOLDERS EQUITY					
Ordinary shares	33	33	0.0%	33	0.0%
Additional paid-in capital	142,451	142,128	0.2%	142,253	0.1%
Retained earnings (accumulated deficits)	(39,293)	(40,702)	-3.5%	(44,263)	-11.2%
Accumulated other comprehensive income	5,048	6,014	-16.1%	5,209	-3.1%
Treasury stock	(22,863)	(22,904)	-0.2%	(24,021)	-4.8%
Total shareholders equity	85,376	84,569	1.0%	79,211	7.8%
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	95,317	93,370	2.1%	88,429	7.8%
Cash and equivalents	$40,812	$45,112	-9.5%	$47,490	-14.1%
Change in cash and equivalents	(5,309)	(1,064)	399.0%	(3,006)	76.6%
Market value	48,958,400	35,214,410	39.0%	50,695,400	-3.4%
Enterprise value	8,112,400	(9,933,590)	-181.7%	3,171,400	155.8%
DSO	57	55	3.6%	49	16.3%
Inventory Days	121	124	-2.4%	124	-2.4%

ANNUAL CASH FLOW

	12 Months Ended December 31,				
	2017	2016	2015	2014	2013
OPERATING ACTIVITIES					
Net loss	$ (6,145)	$ (2,986)	$ (21,095)	$ (15,057)	$ (19,099)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization	1,667	1,682	2,446	3,718	4,685
Stock-based compensation	1,589	1,606	1,912	2,120	2,609
Loss on asset write-off	0	0	0	82	
Inventory write-downs	642	1,527	913	1,538	900
Gain on sale of long-term investments	(20)	(948)	(8)	(436)	
Impairment loss on long-term investments	0	0	4,953	83	
Gain on disposal of property & equipment, net	(137)	(1,726)	(738)	(428)	(106)
Deferred income taxes	40	(1,231)	1,989	78	41
Other, net	0	0	0	(36)	(1)
Changes in operating assets and liabilities:					
Accounts receivable, net	(1,979)	(2,008)	1,592	3,235	(1,251)
Inventories	(697)	(1,140)	(1,933)	(2,963)	(200)
Prepaid expenses and other current assets	(139)	(6)	191	130	510
Deferred charges	(553)	(375)	(416)	(985)	(1,366)
Notes and accounts payable	(1,869)	996	1,202	(2,038)	413
Income tax payable	161	(2,065)	1,595	412	(124)
Accrued expenses and other current liabilities	186	(1,064)	(1,039)	577	(1,083)
Accrued pension liabilities	13	(4)	(11)	(12)	(25)
Other liabilities	3	(56)	(168)	(346)	(8,893)
Net cash used in operating activities	(7,238)	(7,798)	(8,615)	(10,328)	(22,990)
Acquisition of:					
Short-term investments	(8,505)	(28,797)	(7,128)	(22,346)	(15,496)
Long-term investments	0	0			(250)
Property and equipment	(704)	(673)	(724)	(1,004)	(743)
Decrease (increase) in:					
Restricted assets	0	0			10,000
Restricted cash	0	0	132	(1)	1
Other assets	22	40	82	116	108
Proceeds from:					
Sale of short-term investments	12,635	18,331	16,755	34,333	52,131
Sale of long-term investments	0	5,982	167	1,304	0
Return of capital from LT investment	1,163	17	370	0	
Disposal of property and equipment	145	3,837	3,205	1,982	166
Net cash provided by investing activities	4,756	(1,263)	12,859	14,384	45,917
FINANCING ACTIVITIES					
Acquisition of treasury stock	(708)	(619)	(3,233)	(4,965)	(8,279)
Proceeds from:					
Exercise of stock options	29	2	31	44	25
Issuance of ordinary shares under the Employee Stock Purchase Plan	84	73	180	258	335
Net cash used in financing activities	(595)	(544)	(3,022)	(4,663)	(7,919)
EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATE	265	(262)	(1,092)	(617)	(613)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(2,812)	(9,867)	130	(1,224)	14,395
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	31,332	41,199	41,069	42,293	27,898
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	28,520	31,332	41,199	41,069	42,293
SUPPLEMENTAL DISCLOSURES OF CASH FLOWS					
Cash paid for tax	$ 818	$ 4,349	$ 1,068	$ 697	$ 1,064
Cash Flow	(2,364)	(2,076)	(9,628)	(8,338)	(10,971)
Free cash flow	(3,068)	(2,749)	(10,352)	(9,342)	(11,714)

HISTORICAL STOCK PRICE



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