UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the Month of November, 2010

CAMTEK LTD. (Translation of Registrant's Name into English)

Ramat Gavriel Industrial Zone
P.O. Box 544
Migdal Haemek 23150
ISRAEL
(Address of Principal Corporate Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F x Form 40-F o

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities and Exchange Act of 1934.

Yes o No x

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CAMTEK LTD. (Registrant)

By: /s/ Mira Rosenzweig

Mira Rosenzweig, Chief Financial Officer

Dated: November 4, 2010

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FOR IMMEDIATE RELEASE

CAMTEK ANNOUNCES THIRD QUARTER 2010 RESULTS

65% year over year growth in revenue and increasing profitability

MIGDAL HAEMEK, Israel – November 4, 2010 – Camtek Ltd. (NASDAQ and TASE: CAMT), today announced its financial results for the quarter ended September 30, 2010.

Financial Highlights of the Third Quarter

- Revenues of \$23.9 million representing a 65% year-over-year increase and a 15% sequential increase;
- Non-GAAP operating income of \$2.5 million compared with a non-GAAP operating loss of \$0.1 million in the third quarter of 2009. GAAP operating income reached \$2.3 million; and
- •Non-GAAP net income of \$2.5 million compared with a non-GAAP net loss of \$0.3 million in the third quarter of 2009. GAAP net income reached \$2.0 million;

Results for the three and nine months ended September 30, 2010 on a non-GAAP basis, exclude the following items: (i) expenses with respect to the acquisitions of SELA and Printar; (ii) share based compensation expenses; and (iii) restructuring expenses due to reorganization in the Company's subsidiaries in Europe and China. Reconciliation between the GAAP and non-GAAP results appears in the tables at the end of this press release.

Third Quarter 2010 Financial Results

Revenues for the third quarter of 2010 increased 65% to \$23.9 million, compared to \$14.5 million in the third quarter of 2009. Revenues grew 15% sequentially, representing the sixth quarter of continued sequential growth. This growth is a result of the continued increase in demand from customers, due to improving market conditions as well as penetration into new customers and sales of new products.

Gross profit on a GAAP basis for the quarter was \$10.9 million (45.6% of revenues), compared to gross profit of \$6.1 million (42% of revenues) in the third quarter of 2009. On a non-GAAP basis, gross profit for the third quarter of 2010 totaled \$10.9 million (45.8% of revenues). The improvement in the gross margin resulted mainly from the increase in revenues.

Operating income on a GAAP basis in the third quarter of 2010 was \$2.3 million (9.7% of revenues) compared with an operating loss of \$179 thousand in the third quarter of 2009. Non-GAAP operating income was \$2.5 million (10.5% of revenues) in the third quarter of 2010.

Net income on a GAAP basis for the third quarter of 2010 totaled \$2.0 million, or \$0.07 per diluted share, compared to a net loss of \$0.3 million, or a loss of \$0.01 per share in the third quarter of 2009. On a non-GAAP basis, net income in the third quarter of 2010 was \$2.5 million, or \$0.09 per diluted share.

Cash and cash equivalents including restricted cash as of September 30, 2010 was \$13.1 million (of which \$5.2 million is restricted), and the Company owed bank debt of \$2 million, compared to \$14.1 million of unrestricted cash and cash equivalents and no bank debt, at the end of the prior quarter. The decrease in the cash level in the quarter, resulted mainly from a negative operating cash flow of \$0.9 million, due to an increase in accounts receivable and inventory, because of the increase in sales as well as the Company's expectations for increased future demand. The Company also repaid a loan of \$1.7 million to a third party in the third quarter.

In August 2010, the Company signed an agreement with an Israeli bank for a credit line totaling \$11.5 million. Out of that, \$2.6 million is a bank loan out of which the Company has already utilized \$2 million, and the remaining \$8.9 million is a bank guarantee to support a bond deposited with the U.S. Federal District Court in Minnesota, in order to stay judgment during the appeal process in a patent infringement case filed against Camtek by a competitor. To secure the above credit line, the Company deposited \$5.2 million of its cash as restricted cash.

Roy Porat, Camtek's Chief Executive Officer, commented, "We are very pleased with our third quarter results, which demonstrated very strong growth on both a sequential and year-over-year basis. The markets in which we traditionally operate continue to be in high utilization, with customers actively expanding their capacity by investing in capital equipment. In addition, our new product lines of Macro Inspection and Sample Preparation are gaining increasing traction in the market, and we achieved sales and important penetrations into new customers for both product lines. Our semiconductor revenues have become an important portion of our overall mix."

Concluded Mr. Porat, "In terms of our outlook for the fourth quarter, we anticipate maintaining our current high quarterly revenue level, coming in between \$22-\$25 million. We also expect our operating cash flow will improve in the fourth quarter and into next year. Finally, we believe that we will continue to grow into 2011, particularly as our new products and growth engines begin to more significantly contribute to our revenues."

Conference Call

Camtek will host a conference call today, November 4, 2010, at 11:00 am ET.

Roy Porat, Chief Executive Officer and Mira Rosenzweig, Chief Financial Officer, will host the call and will be available to answer questions after presenting the results.

To participate, please call one of the following telephone numbers a few minutes before the start of the call.

US: 1 866 860 at 11:00 am Eastern Time

9642

Israel: 03 918 0609 at 5:00 pm Israel Time

International: +972 3 918

0609

For those unable to participate, the teleconference will be available for replay on Camtek's website at http://www.camtek.co.il/beginning 24 hours after the call.

ABOUT CAMTEK LTD.

Camtek Ltd provides automated solutions dedicated for enhancing production processes and yield, enabling our customers new technologies in two industries: Semiconductors, Printed Circuit Board (PCB) & IC Substrates.

Camtek addresses the specific needs of these industries with dedicated solutions based on a wide and advanced platform of technologies including intelligent imaging, image processing, ion milling and digital material deposition. Camtek's solutions range from micro-to-nano by applying its technologies to the industry-specific requirements.

This press release is available at www.camtek.co.il.

This press release may contain projections or other forward-looking statements regarding future events or the future performance of the Company. These statements are only predictions and may change as time passes. We do not assume any obligation to update that information. Actual events or results may differ materially from those projected, including as a result of changing industry and market trends, reduced demand for our products, the timely development of our new products and their adoption by the market, increased competition in the industry, intellectual property litigation, price reductions as well as due to risks identified in the documents filed by the Company with the SEC.

Use of non-GAAP Measures

This press release provides financial measures that exclude certain items and are therefore not calculated in accordance with generally accepted accounting principles (GAAP). Management believes that these Non-GAAP financial measures provide meaningful supplemental information regarding our performance. The presentation of this non-GAAP financial information is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with GAAP. Management uses both GAAP and non-GAAP measures when evaluating the business internally and therefore felt it is important to make these non-GAAP adjustments available to investors.

Camtek Ltd.

December

September

Balance Sheet

(Ίn	thousands)

	September 30,	December 31,	
	2010	2009	
		U.S. Dollars (In	
		`	
	thous	ands)	
Assets			
Current assets			
Cash and cash equivalents	7,977	15,802	
Accounts receivable, net	30,812	18,712	
Inventories	20,989	14,176	
Due from affiliates	-	344	
Other current assets	2,894	1,691	
Deferred tax asset	68	68	
Total current assets	62,740	50,793	
Fixed assets, net	15,002	15,394	
Restricted deposits *	5,175	-	
Long term inventory	2,600	4,661	
Deferred tax asset	98	98	
Other assets, net	460	460	
Intangible assets **	4,225	4,356	
Goodwill	3,653	3,653	
	16,211	13,228	
Total assets	93,953	79,415	
Liabilities and shareholders' equity			
Current liabilities			
Short term bank loans	682	-	
Due to affiliates	34	-	
Accounts payable – trade	11,536	4,494	
Long term bank loans – current portion	433	-	
Convertible loan – current portion	-	1,666	
Other current liabilities	17,746	12,945	
Total current liabilities	30,431	19,105	
Long term liabilities			
Long term bank loans	867	-	
Liability for employee severance benefits	570	487	
Other long term liabilities **	9,438	8,802	
	10,875	9,289	
Total liabilities	41,306	28,394	
Commitments and contingencies			

Shareholders' equity

Ordinary shares NIS 0.01 par value, authorized 100,000,000 shares,				
issued 31,355,236 as of September 30, 2010 and 31,328,119 as				
of December 31, 2009, outstanding 29,262,860 as of September				
30, 2010 and 29,235,743 as of December 31, 2009	132			
Additional paid-in capital			60,297	
Retained earnings (accumulated losses))	(7,510)
	54,545		52,919	
Treasury stock, at cost (2,092,376 as of September 30, 2010 and as of December 31,				
2009)	(1,898)	(1,898)
Total shareholders' equity			51,021	
Total liabilities and shareholders' equity			79,415	

- (*) Restricted cash pledged against bank guarantee related to the Rudolph Technologies appeal
- (**) Relates to Printar and SELA acquisitions

Camtek Ltd.

Consolidated Statements of Operations

(In thousands, except share data)

Nine Months ended Three Months ended Year ended September 30, September 30, December 31, 2010 2009 2010 2009