CAMTEK LTD
Form 20-F
March 15, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 20-F

(Mark One)

Registration statement pursuant to Section 12(b) or (g) of the Securities Exchange Act of 1934

or

Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2016

or

Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

or

Shell Company report pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934

Date of event requiring this shall Company report _____

For the transition period from _____ to _____

Commission file number 000-30664

Camtek Ltd.
(Exact name of Registrant as specified in its charter)

Israel
(Jurisdiction of incorporation or organization)

Ramat Gavriel Industrial Zone, P.O. BOX 544, Migdal Ha'Emek, Israel
(Address of principal executive offices)

Moshe Eisenberg, Telephone: (972) (4) 6048100, Facsimile: (972) (4) 6048300, E-mail: moshee@camtek.com
Ramat Gavriel Industrial Zone, P.O. BOX 544, Migdal Ha'Emek, Israel
(Name, Telephone, E-Mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:
Ordinary Shares, nominal value NIS 0.01 per share
(Title of each Class)

Nasdaq Global Market
(Name of each Exchange on which registered)

Securities registered or to be registered pursuant to Section 12(g) of the Act:
None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:
None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the Annual Report:

35,348,176 Ordinary Shares, par value NIS 0.01 per share.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

£ Yes T No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

£ Yes T No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

S Yes £ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

S Yes £ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer" and "large accelerated filer" in Rule 12b-2 of the Exchange Act (check one):

£ Large Accelerated Filer £ Accelerated Filer T Non-Accelerated Filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

£ Yes T No

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INTRODUCTION

Definitions

In this annual report, unless the context otherwise requires:

- references to "Camtek," the "Company," "us," "we" and "our" refer to Camtek Ltd. (the "Registrant"), an Israeli company, and its consolidated subsidiaries (unless otherwise indicated);

- references to "ordinary shares," "our shares" and similar expressions refer to the Registrant's ordinary shares, NIS 0.01 nominal (par) value per share;

- references to "dollars," "U.S. dollars" and "$" are to United States Dollars;

- references to "shekels" and "NIS" are to New Israeli Shekels, the Israeli currency;

- references to the "Companies Law" are to Israel's Companies Law, 5759-1999;

- references to the "Israeli Securities Law" are to Israel's Securities Law, 5728-1968;

- references to the "SEC" are to the United States Securities and Exchange Commission; and

- references to the "Nasdaq Rules" are to rules of the Nasdaq Global Market.

Cautionary Language Regarding Forward-Looking Statements

This annual report includes certain statements that are intended to be, and are hereby identified as, "forward-looking statements" for the purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future events.

Forward-looking statements can be identified by the use of forward-looking terminology words such as "may," "will," "should," "could," "expects," "plans," "intends," "anticipates," "believes," "estimates," "predicts," "seeks," "strategy," "potential" or "continue" or the negative or other variations of these words, or other comparable words or phrases, but are not the only way these statements are identified. These statements discuss future expectations, plans and events, contain projections of results of operations or of financial condition or state other "forward-looking" information. When a forward-looking statement includes an underlying assumption, we caution that, while we believe the assumption to be reasonable and make it in good faith, assumed facts almost always vary from actual results, and the difference between a forward-looking statement and actual results can be material. Forward-looking statements may be found in Item 4: "Information on the Company" and Item 5: "Operating and Financial Review and Prospects" and in this annual report generally. Our actual results could differ materially from those anticipated in these statements as a result of various factors, including all the risks discussed in "Risk Factors" and other cautionary statements in this annual report. All of our forward-looking statements are qualified by and should be read in conjunction with those disclosures. Except as may be required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this annual report might not occur.

PART I

Item 1. Identity of Directors, Senior Management and Advisers.

Not applicable.

Item 2. Offer Statistics and Expected Timetable.

Not applicable.

Item 3. Key Information.

A. Selected Consolidated Financial Data.

We derived the selected data under the captions "Selected Statement of Operations Data" for the years ended December 31, 2016, 2015 and 2014, and "Selected Balance Sheet Data" as of December 31, 2016 and 2015 from the audited consolidated financial statements included elsewhere in this Annual Report. We derived the selected data under the captions "Selected Statement of Operations Data" for the years ended December 31, 2013 and 2012 and "Selected Balance Sheet Data" as of December 31, 2014, 2013 and 2012 from audited financial statements that are not included in this Annual Report.

For all fiscal periods for which consolidated financial data are set forth below, our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	U.S. Dollars (in thousands, except per share data)				
Selected Statement of Operations Data:					
Revenues:					
Sales of products	95,748	84,059	71,371	67,864	66,929
Service fees	13,755	15,216	16,942	17,541	17,618
Total revenues	109,523	99,275	88,313	85,405	84,547
Cost of revenues:					
Cost of products sold	49,399	44,851	35,870	38,692	35,908
Cost of services	11,239	11,298	11,424	12,311	11,574
Reorganization and impairment	4,931				
Total cost of revenues	65,569	56,149	47,294	51,003	47,482
Gross profit	43,954	43,126	41,019	34,402	37,065
Research and development costs	15,896	14,860	14,406	14,370	12,916
Selling, general and administrative expenses	25,501	23,587	21,417	22,362	21,138
Reorganization and impairment	(4,059)	138	60	(3,466)	3,031
Loss from litigation	-	14,600	-	-	-
Total operating expenses	37,338	53,185	35,883	33,266	37,085
Operating income (loss)	6,616	(10,059)	5,136	1,136	(20)
Financial income (expenses), net	(994)	(1,877)	(1,220)	(1,738)	233
Income (loss) before income taxes	5,622	(11,936)	3,916	(602)	213
Income tax (expense) benefit	(888)	1,823	(579)	609	(210)
Net income (loss)	4,734	(10,113)	3,337	7	3
Earnings (loss) per ordinary share:					
Basic	0.13	(0.30)	0.11	0.00	0.00
Diluted	0.13	(0.30)	0.11	0.00	0.00
Weighted average number of ordinary shares outstanding (in thousands):					
Basic	35,348	33,352	30,464	30,040	29,849
Diluted	35,376	33,352	30,545	30,094	30,013

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	U.S. Dollars (in thousands, except per share data)				
Selected Balance Sheet Data:					
Cash and cash equivalents	19,740 [1]	30,833	18,220	16,495	18,867
Short-term deposits	-	-	8,607	6,000	7,160
Short-term restricted deposit	-	7,875	-	-	-
Long-term restricted deposit	-	-	729	729	729
Total assets	105,540	116,266	96,511	91,850	99,008
Short and long term bank loans	-	-	-	-	6,252
Total liabilities	32,175	48,064	30,779	29,954	38,671
Additional paid in capital	76,463	76,034	63,465	62,966	61,415
Total shareholders' equity[2]	73,365	68,202	65,732	61,896	60,337

Ordinary issued and outstanding shares	35,348,176	35,348,176	30,494,522	30,405,526	29,896,933

[1] Reduction in cash, cash equivalents and short-term restricted deposit reflects the satisfaction of a $14.6 million judgment and interest, which was accrued in the year ended December 31, 2105.
[2] Authorized share capital of 100,000,000 ordinary shares, par value NIS 0.01.
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B. Capitalization and Indebtedness.

Not applicable.

C. Reasons for the Offer and Use of Proceeds.

Not applicable.

D. Risk Factors

There is a high degree of risk associated with our company and business. If any of the following risks occur, our business, revenues, operating results and financial condition could be materially adversely affected and the trading price of our ordinary shares could decline.

Risk Factors Related to Our Business and Our Markets

We are dependent upon the worldwide electronics industry; unfavorable economic conditions and low capital expenditures may negatively impact our operating results.

Our revenue is dependent upon the strength of the worldwide electronics industry. In particular, we depend upon the need by manufacturers in the semiconductor fabrication industry, as well as in the printed circuit board ("PCB") industry, to make continuing capital investments in our products for use in their manufacturing processes.

The capital equipment procurement practices of these manufacturers have historically been cyclical in nature, and there have been both periodic and sustained downturns. These spending levels are impacted by the actual and expected worldwide level of demand for consumer end products that utilize our solutions in their production processes. Demand for consumer end products is normally a function of prevailing global or regional economic conditions and is negatively affected by a general economic slow-down and/or periods of economic uncertainty as consumers reduce discretionary spending on electronics. Although we have seen a more stable overall pattern of capital investments in our industries in recent periods, the occurrences of cyclical downturns in these industries are very difficult to predict. Although we have in the past implemented cost reduction and business realignment measures in response to prevailing economic conditions which had led to decreased demand, we are limited in our ability to reduce expenses due to the ongoing need to invest in research and development and the need to maintain short lead times for delivery and our worldwide customer service and support operations. In circumstances of significantly reduced overall demand, or delays in capital investment due to uncertain economic and/or industry conditions, or if orders received differ from our expectations with respect to the product, volume, price or other matters, our fixed cost structure could have a material adverse effect on our business and results of operations. Our inability to respond to industry cycles could have a material adverse effect on our business and results of operations.

Demand for our products is also created, in part, by technological developments that affect product functionality or give rise to new, enhanced or more complex electronic devices. These developments generate an ongoing need on the part of electronics component manufacturers for the type of improved yield-enhancing and production solutions we provide. If changes in these technologies do not continue to occur, or if other technologies were to emerge that lessened or obviated the need for the use of our solutions in electronic devices, the overall demand for our products could be reduced.

The markets we serve are highly competitive and have dominant market participants with greater resources. Such competition could adversely affect the terms on which we sell our products and may negatively affect our financial results.

The markets that we serve are highly competitive. During market downturns competition is intensified due to the reduced demand for the products that we manufacture. When competitors respond to declining demand by offering discounts, free evaluation machines or more favorable credit terms, we may need to implement some or all of the same methods in order to maintain our market position. These could mean lower prices for our products and a corresponding reduction in our gross margin, as well as more favorable payment terms to our customers and a corresponding decline in our cash flow. If we have to lower prices to remain competitive and are unable to reduce our costs to offset price reductions or are unable to introduce new, higher performance products with higher prices, our operating results may be adversely affected.

In the semiconductor manufacturing industry, our main competitors are Rudolph, ATI Electronics Pty Ltd, KLA-Tencor Corporation, Cheng Mei Instrument Technology Co., ASTI Holding Limited and Toray Industries, Inc.

In the PCB industry, our principal competitor and the dominant market participant is Orbotech Ltd., with additional competitors including Dainippon Screen Manufacturing Company, Gigavis Co. Ltd., Shirai Electronics Industrial Co. Ltd., ATI Electronics Pty Ltd. and local automated optical inspection ("AOI") vendors in China and Taiwan such as Machvision Inc., Optima Ltd., Ovitech and Jointpower Technology Co,. Ltd. In addition, there is a market for used AOI systems for PCB manufacturers, which may reduce the demand for our products and force us to lower our prices in certain cases.

Some of our competitors have greater financial, personnel and other resources and offer a broader range of products and services. These competitors may be able to respond more quickly to new or emerging technologies or changes in customer requirements, develop additional or superior products, benefit from greater economies of scale, offer more aggressive pricing or devote greater resources to the promotion of their products. If we are unsuccessful in effectively responding to our competition, our financial results will be adversely affected by reduced revenues as well as lower margins, which may lead to financial losses.

Third parties have asserted claims, and may assert additional claims, that our products infringe the intellectual property rights of others, which could expose us to costs and risks.
Third parties, including one of our competitors in the field of semiconductor wafer inspection equipment, Rudolph Technologies Inc. ("Rudolph"), have asserted claims, and may assert additional claims in the future, that we have infringed their patents or intellectual property rights. Any intellectual property claims against us, even if without merit, could lead to protracted litigation, could be costly to defend and could divert management's attention from our business. Successful claims against us (such as the claim asserted by Rudolph regarding our Falcon product in which a final ruling was granted in Rudolph's favor in 2016) could impose on us monetary awards for damages, as well as for plaintiff's attorney's fees and other costs, and could limit our ability to sell products in certain jurisdictions; see in Item 8.A – "Consolidated Statements and Other Financial Information"- "Legal Proceedings" below.

There are currently two pending patent litigation cases brought by Rudolph against us in the United States. Although we believe that we have strong defenses against these claims, we cannot assure you that we will ultimately prevail against Rudolph's additional patent infringement claims. If Rudolph were to ultimately succeed with its infringement actions, it could have a negative impact on our business and could result in monetary damages being assessed against us which will affect our profitability and liquidity. Rudolph's actions have already subjected us, and may continue to subject us, to significant legal and other defense costs, which would impact our cash resources and profitability. (see Item 8.A – "Consolidated Statements and Other Financial Information"- "Legal Proceedings" – "Litigation with Rudolph Technologies Inc.").

Our operating results have varied, and will likely continue to vary significantly from quarter to quarter, making it difficult to predict future results.

Our quarterly operating results have varied in the past and will likely continue to vary significantly from quarter to quarter in the future. This complicates our planning processes, reduces the predictability of our earnings and subjects our stock to price and volume fluctuations. Period-to-period comparisons of our results of operations may be meaningless, and you should not rely on them as indications of our future performance.

Some of the factors that may influence our operating results include:

·change in customer demand for our systems and installation schedules;

·product introductions and the market penetration period of new products;

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·global economic conditions and worldwide demand for electronic equipment;

·rapid shifts in industry capacity;

·the size, timing and shipment of substantial orders;

·legal expenses and the impact of legal actions;

·timing of evaluation and qualification of our products by new customers;

·lack of visibility/low levels of backlog from the preceding quarter;

·product mixes;

·pricing of our products;

·timing of new product upgrades or enhancements; and

·interest and exchange rates

In light of these factors and the cyclical nature of the markets we target, we expect to continue to experience significant fluctuations in our quarterly and annual operating results.

Failure or delays in the development process and subsequent commercialization of our new functional inkjet technology (“FIT”) could result in loss of capital investment and could have an adverse effect on our operating results.

Following our decision to reorganize our current mode of operation with respect to our FIT business activity, we have ceased supporting our previous line of FIT systems (the “Gryphon System”), and have re-focused on developing the next generation of our FIT product line (the "New FIT Product"); (see in Item 4.A below – "History and Development of the Company").

We are still the process of developing the New FIT Product and cannot guarantee the successful completion of such development which also may take longer than anticipated. Challenges we may face in the development process include, inter alia, developing ink that will meet market requirements, collaborating with third party ink manufacturers, and challenges in development of the printer. In addition, even if we are successful in the development of the New FIT Product, we may face further challenges in the commercialization phase.

A failure of this project or delays in our ability to successfully develop and subsequently commercialize the New FIT Product could result in loss of capital investment and inventory write-offs (as it did in 2015 and 2016 – see in Item 5.A below – "Operating Results – Critical Accounting Policies– Valuation of Inventory"). In addition, the results of commercialization may not represent a fair return on our investment in the New FIT Product.

Technology in the markets in which we operate is rapidly evolving, and we may not be able to keep pace with these changes or with emerging industry standards and may incur substantial costs as a result. This could result in a loss of revenues or adversely affect our profits.

The markets for our products are characterized by changing technology, evolving industry standards, changes in end-user requirements and new product introductions. Potential new technologies and improvements to existing production equipment and methods could improve production yields, thereby reducing the need to use our AOI systems in these industries. In addition, new technologies could emerge as alternatives to our products.

Our future success will depend on our ability to enhance our existing products and to develop and introduce new technologies for the markets in which we operate. These products must keep pace with technological developments and address the increasingly sophisticated needs of our customers. If we fail to keep pace with technological changes, with products offered by our competitors or with emerging industry standards, our ability to attract new business and generate revenues may be damaged.

We seek to expand our activity beyond our existing served markets, into adjacent markets such as the inspection of silicon wafers at various steps during their manufacturing process inside the wafer fabrication facility. Technological developments in production processes and in process control may reduce the growth we anticipate in demand for inspection systems. If this happens, we may not be able to cover our investments in penetrating these markets, or will have to increase our research and development ("R&D") and marketing expense to adapt our products to such changes. Adopting new technologies may also result in material inventory write-offs which would adversely affect our results of operations.

We have incurred major losses in the past and may not sustain profitable operations in the future. Moreover, if our business deteriorates, we could face liquidity problems.

We incurred significant losses in 2015 as well as in earlier periods prior to 2011. We may use cash in our operations during 2017 for working capital and investment activities and may continue to incur significant additional legal expenses and other costs associated with defending against certain ongoing patent infringement actions, all of which may reduce our available cash resources and harm our operations.

We may not be able to achieve or increase profitability on a quarterly or annual basis.

We have from time to time in the past undertaken cost cutting initiatives in response to economic conditions, including reducing our worldwide workforce. In the future, we may again have to undertake cost reduction initiatives, which could lead to a deterioration of our competitive position, and any difficulty in reducing our cost structure could negatively impact our results of operations and cash flow in the future. If available liquidity is not sufficient to meet our operating and other obligations as they come due, we may need to further reduce expenditures to meet our cash requirements, or pursue debt or equity financing arrangements.

Although we currently have a line of credit from Bank Mizrahi in the amount of $5 million, additional financing arrangements may not be available to us on acceptable terms when needed, or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our existing shareholders. For example, if we raise additional funds by issuing equity securities, our existing shareholders would experience dilution of their shareholdings. Debt financing, if available, may involve restrictive covenants that could limit our flexibility in conducting future business activities. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail one or more of our R&D programs. We also could be required to seek funds through arrangements with business collaborators on terms that would otherwise not be advantageous to us.

Fluctuations in currency exchange rates may result in the prices of our products becoming less competitive or in additional expenses being recorded, and thus may have negative impact on our profitability.

Currency exchange rate fluctuations may affect the prices of our products. Our products' prices in most countries are denominated in U.S. Dollars, except for in Europe, in Japan and part of our revenues from products in China. In recent months, foreign currency exchange rates have been subject to considerable fluctuations. If there is a significant devaluation in the relevant local currencies in which we operate compared to the U.S. Dollar, the prices of our products will increase relative to that local currency and may be less competitive. In addition, much of our service income is denominated in local currencies. If a larger number of our sales were to be denominated in currencies other than U.S. Dollars, our reported revenue and earnings would be subject to a greater degree of foreign exchange fluctuations. As most of our revenues are denominated in U.S. Dollars and as our financial results are reported in U.S. Dollars, we believe that inflation and fluctuations in the NIS/ U.S. Dollar exchange rate have no material effect on our revenues. However, a major portion of the costs of our Israeli operations, such as personnel, subcontractors, materials and facility related costs, are incurred in NIS. Therefore an increase in the NIS value relative to the U.S. Dollar will increase our costs expressed in U.S. Dollars, and a decrease in the NIS value relative to the U.S. Dollar will decrease our costs expressed in U.S. Dollars. In addition, part of our revenues from products in China is denominated in local currency. Most of the expenses and purchases in China are also denominated in local currency. As our financial results

are reported in U.S. Dollars, fluctuations in the Chinese Renminbi ("CNY") to U.S. Dollar exchange rate may affect our revenues and level of expenses. We may, from time to time, take various measures designed to reduce our exposure to these effects, but any such steps may be inadequate to protect us from currency rate fluctuations. Failure to protect adequately against currency rate fluctuations could have a material adverse effect on our financial condition and results of operations.

We operate an international sales and manufacturing organization. A substantial majority of our sales have been to manufacturers in the Asia Pacific region. The concentration of our sales and other resources within a particular geographical region subjects us to additional risks that could impede our plans for expansion and growth.

The majority of our sales is in the Asia Pacific region. In 2016, our sales in the Asia Pacific region accounted for approximately 85% of our total revenues, of which approximately 31% of our total revenues were from sales in China and Hong Kong, 25% of sales in Taiwan and 15% of sales in Korea. In addition, parts of the manufacturing and assembly of our AOI systems for the PCB industry are made in our manufacturing facility in Suzhou, China. A number of Asian countries have experienced or could experience political and economic instability. For example, Taiwan and China have had a number of disputes, as have North and South Korea. Changes in local legislation, changes in governmental controls and regulations, changes in tariffs and taxes, trade restrictions, a downturn in economic or financial conditions, political instability, an outbreak of hostilities or other political upheaval, as well as any further extraordinary events having an adverse effect on the economy or business environment in this region, would likely harm the operations of our customers in these countries, may cause a significant decline in our future revenues and may have an adverse effect on our results of operations and cash flow. These general risks are heightened in China, where the nature of the economy and the legal parameters are rapidly evolving and where foreign companies may face cultural obstacles.

A longer sales process for new products may increase our costs and delay time to market of our products, both of which may negatively impact our revenues, results of operations, cash flow and may result in inventory write-offs.

Our sales process to new and existing customers usually involves: demonstrations and testing against industry benchmarks in our sales centers; sales and technical presentations and presentations regarding our products' competitive advantages; and installation of the systems at the customer's site for side-by-side competitive evaluations for a period of approximately six months. More evaluation time is devoted during the initial market penetration period for several new products such as our Eagle product line, and for new customers in new markets, since these circumstances usually require qualification of the systems by the customers and engineering efforts to fix errors, customize tasks and add new features. Considering the above factors, the length of time until we recognize revenue can vary and affect our revenues, cash flow and results of operations.

The long sales process may cause an increase in inventory levels and a risk for inventory write downs and write-offs; for more details regarding recent inventory write downs and write-offs see Item 5.A – "Operating Results – Critical Accounting Policies– Valuation of Inventory".

We depend on a limited number of suppliers, and in some cases, a sole supplier and/or subcontractor. If one or more of our third party suppliers or subcontractors does not provide us with key components or subsystems, we may not be able to deliver our products to our customers in a timely manner, and we may incur substantial costs to obtain these components from alternate sources.

While a portion of our manufacturing is performed in our production facilities in Israel and in China, we outsource some of our manufacturing processes to contract manufacturers ("Contract Manufacturers"), including one significant contract manufacturer that is located in Israel. From time to time, we have experienced and may in the future experience delays in shipments from our Contract Manufacturers. In addition we rely on single source and limited source suppliers and subcontractors ("Key Suppliers") for a number of essential components and subsystems of our products. We do not have agreements with all of these suppliers and subcontractors for the continued supply of the components or subsystems they provide.

Although we believe that our Contract Manufacturers and Key Suppliers have sufficient economic incentive to perform our manufacturing and meet our supply needs, their performance is not within our control and manufacturing problems may occur in the future, including inferior quality and insufficient quantities of components. Delays, disruptions, quality control problems and loss in capacity could result in delays in deliveries of our products to our

customers, which could subject us to penalties payable to our customers, increased warranty costs and possible cancellation of orders.

If our Contract Manufacturers and Key Suppliers experience financial, operational, manufacturing capacity or other difficulties, or shortages in components required for manufacturing, our supply may be disrupted and we may be required to seek alternate manufacturers. We may be unable to secure alternate manufacturers that meet our needs in a timely and cost-effective manner.

We may encounter difficulties in purchasing key components and subsystems, or overestimate our needs, to meet customer demand.

In the current highly competitive business environment, our customers require us to fill orders within a very short period of time. Our products are complex and require essential components and subsystems that are produced by a number of suppliers and subcontractors. In order to meet our customers' needs in the timeframe they require, we usually need to pre-order components and subsystems based on our forecasts of future orders, rather than on actual orders. While we believe that we have sufficient inventory to fill our customers' orders, our predictions may not correspond to our actual future needs and our suppliers and subcontractors cannot always supply such components and subsystems within a shorter than anticipated time frame. Our inability to anticipate rapid market changes may cause an increase of inventory which could result in material inventory write-offs, which we have incurred in the past, or may alternately limit our ability to satisfy customer orders, which could result in the loss of sales and could cause customers to seek products from our competitors.

If we are unable to protect our proprietary technologies, we may not be able to compete effectively.

We differentiate our products and technologies from those of our competitors by using our intellectual property for the development of our products. We rely on a combination of patents, copyrights, trade secrets, trademarks, confidentiality and non-disclosure agreements to protect our intellectual property. These measures may not be adequate to protect our proprietary technologies and it may be possible for a third party, including a competitor, to copy or otherwise obtain and use our products or technologies without authorization or to develop similar technologies independently. Additionally, our products may be sold in countries, particularly in the Asia Pacific region, that provide less protection to intellectual property than U.S., European or Israeli laws. In addition, we have a manufacturing facility in China, in which we manufacture certain components and assemble most of our AOI systems for the PCB industry, where intellectual property laws may not be strictly enforced. Inability to protect our intellectual property may affect our competitive advantage.

We have expanded and may attempt to further expand our activity in the markets in which we operate through merger and acquisition (M&A) activity. Such activity has resulted and may further result in operating difficulties, losses and other adverse consequences.

We have in the past expanded our activity through merger and acquisitions, including the acquisition of assets and certain liabilities of Printar Ltd. ("Printar") and the entire share capital of SELA – Semiconductor Engineering Laboratories Ltd. ("Sela"), (see below in Item 4.B – "Business Overview –Our Business").

We may acquire businesses and assets, which could lead to post-merger integration difficulties; diversion of management's attention from our core business and operations; failure to estimate the acquired businesses' future performance and failure to execute on such expectations; failure to launch new products to our existing or new markets; inaccurate evaluation of expected competition and/or the fair value of certain assets acquired, liabilities assumed and contingent liabilities; and the loss of key employees of the acquired operations.

In addition, as a result of acquisition activity, our future results of operations may be influenced by the possibility of our incurring impairment charges as a result of decline in value of goodwill and other intangible assets, ongoing amortization of intangible assets acquired and financing expenses due to re-evaluation of contingent liabilities and other liabilities assumed presented at fair value (see also in Item 5.A below - "Critical Accounting Policies" and in Note 9– "Goodwill and Intangible Assets, Net", of the consolidated financial statements). Future acquisitions could also

result in potentially dilutive issuances of equity securities, a decrease in our cash resources, incurrence of debt, contingent liabilities or impairment charges related to goodwill and other intangible assets, any of which could harm our business. Furthermore, we compete for acquisition and investment opportunities with other well-established and well-capitalized entities. There can be no assurance that we will be able to locate acquisition or investment opportunities upon favorable terms.

We may face risks of interruptions in our production capabilities.

Our corporate headquarters is located in Migdal Ha'Emek, in the northern part of Israel. Any event affecting this site, including a natural disaster, labor stoppages or armed conflict, may disrupt or indefinitely discontinue our ability to fulfill manufacturing demands and generate revenues, thus negatively impacting our business (see also in this Item 3.D above "We depend on a limited number of suppliers, and in some cases a sole supplier and/or subcontractor" and below - "Risks Relating to Our Operations in Israel ").

We also have a manufacturing facility in China, in which we manufacture certain components and assemble most of our AOI systems for the PCB industry. Therefore, we may be influenced by geopolitical or economic events in China, as well as sourcing risks, such as supply chain and business interruption issues. Events affecting our facility in China may disrupt our manufacturing capabilities and could significantly impair our ability to fulfill orders and generate revenues, thus negatively impacting our business.

Our relationship with Priortech may give rise to conflicts of interest.

We purchase products from, or sell products to companies controlled by Priortech Ltd., our principal shareholder, directly or indirectly, or in which Priortech has substantial holdings, and act jointly with such companies with respect to governmental and administrative matters and the purchase from third parties of various products and services, which may create conflicts of interest. Despite our efforts to conduct ourselves by Israeli law procedural requirements, including regarding audit or compensation committee, board of directors and in certain cases shareholder approvals (including special majority requirement in certain cases) for interested party transactions, we cannot be certain that the possible conflict of interests in any of these transactions and activities is fully eliminated. In addition, Between August 2010 and May 2015, Mr. Amit served as our Active Chairman on a 75% basis (and, as of March 27, 2014 Mr. Rafi Amit had also assumed the responsibilities of our Chief Executive Officer in his capacity as our Active Chairman, following the receipt of shareholder approval for such assumption for a period of three years from the date of such approval, which is due to expire on March 27, 2017 - see Item 6.B below - "Compensation – Employment Agreements") as well as acting as Priortech's Chairman of the board of directors and providing consulting and management services to Priortech on a 25% basis, and, effective as of May 26, 2015, following the receipt of shareholder approval of the new services agreement with Mr. Amit ("Mr. Amit's Amended Agreement") in August 2015, such scope of services provided to us by Mr. Amit (as our Active Chairman, and, as of March 27, 2014 – as our Chief Executive Officer) was increased to 90% and his scope of services to Priortech was decreased to 10%.
Mr. Yotam Stern who acts as one of our Directors, holds several other positions in the Priortech group including the position of Chief Executive Officer at Priortech and at P.C.B Technologies Ltd., an Israeli public company controlled by Priortech. For more details regarding our senior management arrangements, see Item 6.B below - "Compensation – Employment Agreements".

We depend on a limited number of key personnel who would be difficult to replace.

Our continued growth and success significantly depend on the managerial and technical skills of the members of our senior management and key employees. If our operations rapidly expand, we believe that we will need to promote and hire qualified engineering, administrative, operational, financial and marketing personnel. In particular, we may find it difficult to hire key personnel with the requisite knowledge of our business, products and technologies. The process of locating, training and successfully integrating qualified personnel into our operations can be lengthy and expensive. During periods of economic growth, competition for qualified engineering and technical personnel is intense.

Compliance with environmental, health and other laws and potential liabilities could materially impact our business, results of operations and financial condition.

Due to our global operations we must comply with certain international and domestic laws, regulations and restrictions which may expose our business to risks, including as detailed below.

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Pursuant to Section 1502 of the Dodd-Frank Act, United States publicly-traded companies are required to disclose use or potential use of certain minerals and their derivatives, including tantalum, tin, gold and tungsten, that are mined from the Democratic Republic of Congo and adjoining countries and deemed "conflict minerals". These requirements necessitate due diligence efforts to assess whether such minerals are used in our products in order to make the relevant required annual disclosures. We timely file our conflict mineral reports. Yet there are, and will be, ongoing costs associated with complying with these recent disclosure requirements, including due diligence to determine the sources of those minerals that may be used or necessary to the production of our products in order to make the relevant required annual disclosures. We may face reputational challenges that could impact future sales if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to verify with sufficient accuracy the origins of all conflict minerals used in our products.

In addition, our business is subject to numerous domestic laws and regulations designed to protect the environment, including with respect to discharges and management of hazardous substances, wastes and emissions and soil and ground water contamination. The failure to comply with current or future environmental requirements could expose us to criminal, civil and administrative charges and monetary liability. We believe that we have complied with these requirements and that such compliance has not had a material adverse effect on our results of operations, financial condition or cash flows. Although we are not presently aware of any liability that could be material to our business, financial condition or operating results, due to the nature of our business and environmental risks, we cannot provide assurance that any such material liability will not arise in the future.

Breaches of network or information technology security could have an adverse effect on our business.

We may be subject to attempts to breach the security of our networks and IT infrastructure through cyber security attacks which could include, but are not limited to, malicious software, viruses, attempts to gain unauthorized access, whether through malfeasance or error, either from within or outside of our organization, to our data or that of our customers or our customers' customers which may be in our possession. The unauthorized release, corruption or loss of the data, loss of the intellectual property, theft of the proprietary or licensed technology, whether ours, that of our customers or their customers, loss or damage to our data delivery systems, other electronic security breaches could result in liabilities to us and other material costs. Breaches of our networks or IT systems could lead to disruptions in our critical systems, and increased costs to prevent, respond to or mitigate cyber security events. It is possible that our business, financial and other systems could be compromised, which might not be noticed for some period of time. Although we utilize various procedures and controls to mitigate our exposure to such risk, cyber security attacks are evolving and unpredictable and we cannot guarantee that any risk prevention measures implemented will be successful. In addition, while we maintain insurance coverage for some of these events, the potential liabilities associated with these events could exceed the insurance coverage we maintain. The occurrence of such a cyber security attack could lead to financial losses and have a material adverse effect on our reputation, business, financial condition and results of operations.

Risks Relating to Our Ordinary Shares

Our share price and trading volumes have demonstrated significant volatility in the past and may continue to fluctuate in the future. Such share price volatility could limit investors' ability to sell our shares at a profit, could limit our ability to successfully raise funds and may cause additional exposure for securities class action litigation.

The stock market in general and the market price of our ordinary shares, in particular, are subject to fluctuation. As a result, changes in our share price may be unrelated to our operating performance. The price of our ordinary shares has experienced volatility in the past and may continue to do so in the future; during the period from January 1, 2016 through February 28, 2017, the closing price of our ordinary shares ranged from $1.70 to $3.90 (See in Item 9.A below- "Price History of Ordinary Shares"). The volatile price of our shares and periodic volatile trading volume may make it difficult for investors to predict the value of their investment, to sell shares at a profit at any given time, or to plan purchases and sales in advance. Our ordinary shares may experience significant market price and volume

fluctuations in response to numerous factors, many of which are beyond our control, such as the following:

·global economic conditions, which generally influence stock market prices and volume fluctuations;

- investors' views of the attractiveness of our new products, especially the New FIT Product, if and when available;
- changes in expectations as to our future financial performance, including financial estimates or recommendations by securities analysts and investors;
- quarterly variations in our operating results;
- market conditions relating to our customers' industries;
- announcements of technological innovations or new products by us or our competitors; for example, announcements concerning the potential of our New FIT Product, if and when available;
- operating results that vary from the expectations of securities analysts and investors;
- announcements of significant claims or proceedings against us and developments in such proceedings or adverse decisions in pending litigation matters;
- announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- changes in the status of our intellectual property rights and patent litigation;
- additions or departures of our key personnel;
- future offerings or sales of our ordinary shares; and
- large block transactions in our ordinary shares.

Securities class action litigations are being brought from time to time against companies following periods of volatility in the market price of their securities, and one was brought against us. Although this claim was dismissed, we cannot guarantee that similar litigation would not be brought against us in the future.

Our principal shareholder, Priortech Ltd. ("Priortech"), holds a controlling interest in us and will be able to exercise its control in ways that may be adverse to your interests. The loan received by Priortech, for which Priortech has pledged its holdings in our shares, could lead to sales of such shares by Priortech or upon foreclosure, which could have an adverse effect on the market price of our shares.

Priortech beneficially holds 46.17% of our issued and outstanding ordinary shares. As a result, Priortech has the ability to determine the outcome of certain matters submitted to a vote of our shareholders, including the election of members of our board of directors and the approval of significant corporate transactions. This concentration of ownership may also have the effect of making it more difficult to obtain approval for a change in control of the Company. Messrs. Rafi Amit and Mr. Yotam Stern, through a voting agreement with David Kishon, Itzhak Krell (deceased), Haim Langmas (deceased), Zehava Wineberg and Hanoch Feldstien (including the estates of the foregoing deceased founders, the "Founding Members"), governing inter-alia joint voting at Priortech's general meetings of shareholders and the right of first refusal among themselves, hold, as of February 28, 2017 aggregately 35.76% of the voting power at Priortech's general meeting of shareholders and as such may be deemed to control Priortech.

During the year ended December 31, 2016, Priortech pledged all of its holdings in our ordinary shares to its principal lender. 6.0 million of the pledged shares are registered for resale on a shelf registration statement; in the event of foreclosure and sale of these shares into the market during a short period of time, or if Priortech otherwise decides to

sell any such shares in order to comply with its commitments under said loan, the market price of our ordinary shares could be adversely affected. In addition, should Priortech default on its loan, and the lender were to foreclose and sell the pledged shares, Priortech would cease to have a controlling interest in us, and, if the shares were sold to one or a small group of investors, an effective change of control of us could occur.

If we are classified as a passive foreign investment company, our U.S. shareholders may suffer adverse tax consequences.

There is a risk that we may be classified as a passive foreign investment company, or PFIC. Our treatment as a PFIC could result in a reduction in the after-tax return of US holders of our ordinary shares and may generally cause a reduction in the value of our shares. For US federal income tax purposes, we will generally be classified as a PFIC for any taxable year in which either: (i) 75% or more of our gross income is passive income, or (ii) at least 50% of the average value of our total assets (determined on a quarterly basis) for the taxable year produce or are held for the production of passive income. Based on an analysis of our income, assets, activities and market capitalization, we do not believe that we were a PFIC for the taxable year ended December 31, 2016. However, there can be no assurance that the US Internal Revenue Service ("IRS") will not challenge our analysis or our conclusion regarding our PFIC status. There is also a risk that we were a PFIC for one or more prior taxable years or that we will be a PFIC in future years, including 2017. If we were a PFIC during any prior years, US holders who acquired or held our ordinary shares during such years generally will be subject to the PFIC rules. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of our future income, assets, activities and market capitalization, which are relevant to this determination. If we were determined to be PFIC for US federal income tax purposes, highly complex rules would apply to US holders owning our ordinary shares and such US holders could suffer adverse US tax consequences. For more information, please see Item 10.E below - "U.S. Federal Income Tax Considerations– Tax Consequences if We Are a Passive Foreign Investment Company".

Our ordinary shares are traded on more than one market and this may result in price variations.

In addition to being traded on the Nasdaq Global Market, our ordinary shares are traded on the Tel Aviv Stock Exchange, or TASE. Trading in our ordinary shares on these markets take place in different currencies (U.S. Dollars on Nasdaq and NIS on TASE) and at different times (resulting from different time zones, trading days and public holidays in the United States and Israel). The trading prices of our ordinary shares on these two markets may differ due to these and other factors. Any decrease in the price of our ordinary shares on one market could cause a decrease in the trading price of our ordinary shares on the other market.

As a foreign private issuer we are exempted from certain requirements and corporate governance practices imposed by the SEC and Nasdaq, which may result in less protection for investors.

We are a "foreign private issuer" within the meaning of rules promulgated by the SEC. As such, we are exempt from certain provisions under the Securities Exchange Act of 1934, as amended, or Exchange Act, applicable to U.S. public companies, including, for example, rules prescribing the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act.

Further, we are permitted to follow certain home country corporate governance practices and law instead of those rules and practices otherwise required by Nasdaq for domestic issuers. For instance, we have relied on the foreign private issuer exemption with respect to shareholder approval requirements for equity issuances and equity-based compensation plans, with respect to the composition of the compensation committee and Nasdaq requirement to have a formal charter for the compensation committee, and with respect to the quorum requirement for the convening of general meetings of shareholders; See in Item 16.G. below "Corporate Governance".

Following our home country corporate governance practices, as opposed to the requirements that would otherwise apply to a U.S. company listed on Nasdaq, may provide less protection than is afforded to investors under the Nasdaq Rules applicable to domestic issuers.

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Risks Relating to Our Operations in Israel

Conditions in the Middle East and Israel may adversely affect our operations.

Our headquarters, sole R&D facility and one of our manufacturing facilities are located in the State of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly influence our operations. Specifically, we could be adversely affected by:

·hostilities involving Israel;

·the interruption or curtailment of trade between Israel and its present trading partners;

·a downturn in the economic or financial condition of Israel; and

·a full or partial mobilization of the reserve forces of the Israeli army.

Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors. A state of hostility, varying from time to time in intensity and degree, has led to security and economic problems for Israel. Further, all efforts to improve Israel's relationship with the Palestinian Authority have failed to result in a permanent solution, and there have been numerous periods of hostility in recent years. The high level of uncertainty in the region intensified in 2016, with the continuation of the civil war and state of chaos experienced in Syria, adjacent to Israel's northern border, which followed violent uprisings in recent years in other Arab countries in the Middle East and North Africa, such as Egypt and Jordan which border Israel. The continued hostile activities of ISIS, the Islamic State, in Syria, and in the Sinai Peninsula, also contribute to the tension in the region. Also, relations between Israel and Iran continue to be seriously strained, especially with regard to Iran's nuclear program and also due to the fact that Iran is perceived as sponsor of regional extremist Islamic groups that are continuously involved in hostile activities against Israel.

All of the above raise a concern as to the stability in the region which may affect the political and security situation in Israel and therefore could adversely affect our business, financial condition and results of operations.

The deterioration of relations with the Palestinian Authority has already started disrupting some of Israel's trading activities. Certain countries, as well as certain companies and organizations, primarily in the Middle East, but also in Malaysia and Indonesia, continue to participate in a boycott of Israeli firms and others doing business with Israel and Israeli companies. The boycott, restrictive laws, policies or practices directed towards Israel or Israeli businesses could, individually or in the aggregate, have a material adverse effect on our business, for example by way of sales opportunities that we could not pursue or from which we will be precluded in the future. Further deterioration of our relations with the Palestinians or countries in the Middle East could expand the disruption of international trading activities in Israel, may materially and negatively affect our business conditions and could harm our results of operations.

Our business may also be disturbed by the obligation of personnel to perform military service. Our employees who are Israeli citizens are subject periodically to an obligation to perform reserve military service, until they reach the age of 45 (or older, for reservists with certain occupations), but during military conflicts, these employees may be called to active duty for longer periods of time. In response to the increase in violence and terrorist activity in the past few years, there have been periods of significant call-ups for military reservists and it is possible that there will be further military reserve duty call-ups in the future. In case of further regional instability such employees, who may include one or more of our key employees, may be absent for extended periods of time, which may materially adversely affect our business.

We can give no assurance that the political and security situation in Israel, as well as the economic situation, will not have a material adverse impact on our business in the future.

Our ability to take advantage of Israeli government offers programs and tax benefits may change, which could increase our tax expenses.

We benefit from certain Israeli government programs and tax benefits, particularly from tax exemptions including "Approved Enterprise" status due to our manufacturing facilities in Israel. To be eligible for these programs and tax benefits or similar programs in the future, we must continue to meet certain conditions, including making specified investments in fixed assets and equipment. If we fail to meet such conditions in the future, these tax benefits could be cancelled, and we could be required to refund any tax benefits already received. Further, these programs and tax benefits may not be continued in the future at their current levels or at any level. The termination or reduction of these tax benefits would likely increase our tax liability. For information regarding the above-mentioned tax benefits, see in Item 10.E below – "Taxation – Israeli Taxation - Tax Benefits Under the Law for the Encouragement of Capital Investments, 1959."

The government grants we received for research and development expenditures restrict our ability to manufacture products or to transfer technologies outside of Israel and may expose us to payment of increased royalties in connection with such transfer.

We have received government grants from the Israel Innovation Authority (formerly and more commonly known as the Office of the Chief Scientist - the "OCS") for the financing of a portion of our product development expenditures, and have also assumed liabilities of Printar in connection with grants received by Printar from the OCS. The grants received, and Printar liabilities assumed, subject us to the requirements of the Encouragement of Industrial Research and Development Law, 1984 and regulations promulgated there under (together: the "R&D Law") including an obligation for repayment of such grants; As of December 31, 2016, the amount of grants received and not yet repaid stood at $6.5 million; in addition to interest accrued by Camtek, this amount includes liabilities assumed from Printar with respect to which, in light of our decision to stop commercialization of the FIT systems based on such technology, we do not anticipate that any payment will be made (see in Item 4.B below - "Business Overview – Our Business").

In addition to the obligation to pay royalties to the OCS, the R&D Law requires that products which incorporate know-how developed with OCS funds be manufactured in Israel, unless the OCS grants an exception. Approval of an exception may be subject to various conditions, including the repayment of increased royalties. Furthermore, it is generally prohibited to transfer the know-how developed with OCS funds and any right derived therefrom to third parties, unless approved by the OCS, in special cases, subject to the receipt of certain payments.

These restrictions and requirements for payment may impair our ability to sell our technology assets outside of Israel or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel. Furthermore, the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know-how developed with OCS funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the OCS.

Even following full repayment of all OCS grants, unless otherwise agreed by the applicable authority of the OCS, we must nevertheless continue to comply with the abovementioned requirements and restrictions under the R&D Law.

For information regarding the above-mentioned and other restrictions imposed by the R&D Law and regarding grants received by us from the OCS (and the repayment thereof), see in Item 4.B below - "The Israel Innovation Authority, formerly – the Israeli Office of Chief Scientist".

In 2010, a dispute arose between us and the OCS regarding repayment of an increased amount of grants pertaining to certain of our products, the manufacturing and assembly of which has been moved to a foreign subsidiary. This dispute is still pending. For further information, see in Item 4.B below - "The Israel Innovation Authority, formerly – the Israeli Office of Chief Scientist".

It may be difficult to enforce a U.S. judgment against us or our officers and directors, or to assert U.S. securities law claims in Israel.

We are incorporated under the laws of the State of Israel. Service of process upon our directors and officers, substantially all of whom reside outside the United States, may be difficult to obtain within the United States. Furthermore, because the majority of our assets and our directors and officers are located outside the United States, any judgment obtained in the United States against us or any of them may not be collectible within the United States.

Further, it may be difficult to enforce civil liabilities under U.S. securities law in original actions instituted in Israel; Israeli courts may refuse to hear a claim based on an alleged violation of U.S. securities laws reasoning that Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear such a claim, it is not certain whether Israeli law or U.S. law will be applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact by an expert witness, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel addressing these matters.

Provisions of Israeli law could delay, prevent or make undesirable an acquisition of all or a significant portion of our shares or assets.

Israeli corporate law regulates mergers and requires that a tender offer be effected when certain thresholds of percentage ownership of voting power in a company are exceeded (subject to certain conditions), which may have the effect of delaying, preventing or making more difficult a merger with, or acquisition of, us; See Item 10.B below - "Anti-Takeover Effects of Israeli Laws; Mergers and Acquisitions Under Israeli Law". Further, Israeli tax considerations may make potential transactions undesirable to us or to some of our shareholders whose country of residence does not have a tax treaty with Israel granting tax relief to such shareholders from Israeli tax. With respect to mergers, Israeli tax law allows for tax deferral in certain circumstances but makes the deferral contingent on the fulfillment of numerous conditions, including a holding period of two years from the date of the transaction during which certain sales and dispositions of shares of the participating companies are restricted. Moreover, with respect to certain share swap transactions, the tax deferral is limited in time, and when such time expires, the tax becomes payable even if no actual disposition of the shares has occurred. For more information on the provisions of Israeli law in these contexts, please see in Item 10.E below - "Israeli Taxation." In addition, in accordance with the Restrictive Trade Practices Law, 1988 and the R&D Law, approvals regarding a change in control (such as a merger or similar transaction) may be required in certain circumstances. For more information regarding such required approvals please see in Item 4.B below - "The Israel Innovation Authority, formerly – the Israeli Office of Chief Scientist".

These provisions of Israeli law could have the effect of delaying or preventing a change in control and may make it more difficult for a third party to acquire us or for our shareholders to elect different individuals to our board of directors, even if doing so would be beneficial to our shareholders, and may limit the price that investors may be willing to pay in the future for our ordinary shares.

Your rights and responsibilities as a shareholder will be governed by Israeli law which differs in some respects from the rights and responsibilities of shareholders of U.S. companies.

Since we are incorporated under Israeli law, the rights and responsibilities of our shareholders are governed by our articles of association, as amended from time to time (our "Articles") and Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in United States-based corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders and to refrain from abusing its power in the company, including, among other things, in voting at the general meeting of shareholders on certain matters, such as an amendment to a company's articles of association, an increase of a company's authorized share capital, a merger of a company and approval of related party transactions that require shareholder approval. A shareholder also has a general duty to refrain from discriminating against other shareholders. In addition, a controlling shareholder or a shareholder who knows that it possesses the power to determine the outcome of a shareholder vote or to appoint or prevent the appointment of an office holder in a company or has another power with respect to a company, has a duty to act in fairness towards such company. Israeli law does not define the substance of this duty of fairness and there is limited case law available to assist us in understanding the nature of this duty or the implications of these provisions. These provisions may be interpreted to impose additional obligations and liabilities on our shareholders that are not typically imposed on shareholders of U.S. corporations.

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Item 4. Information on the Company.

A. History and Development of the Company

Our legal and commercial name is Camtek Ltd. We were incorporated under the laws of the State of Israel in 1987 and operate under the Companies Law. Our headquarters are located in Ramat Gavriel Industrial Zone, P.O. Box 544, Migdal Ha'Emek 23150, Israel, and our telephone number is 011-972-4-604-8100. Other than Israel, we currently have operations in the Asia Pacific region, North America and Europe. Our agent for service of process in the United States is Camtek USA, Inc., located at 2000 Wyatt Dr., Santa Clara, CA 95054, Tel: (408) 986-9640. Our website is located at www.camtek.com. The information on our website is not incorporated by reference into this Annual Report. We have been a public company since July 2000; our ordinary shares are listed on the Nasdaq Global Market and on TASE (see in Item 9.A. below - "Offer and Listing Details").

In our first years of operation, we provided manual optical inspection equipment to address the needs of the PCB industry. In September 2001, we acquired a developer and producer of AOI systems for the semiconductor fabrication industry. This acquisition allowed us to enter the back end semiconductor inspection market. After a period of intense internal research and development, in the fourth quarter of 2003, we shipped our first new Falcon system for the back end market in the semiconductor industry. The first revenue recognition of the Falcon system was in the second quarter of 2004. Applying our core technologies we have introduced three additional AOI product lines - the Condor, the Gannet and the Eagle. Sales of all four AOI product lines for the semiconductor industry have since accounted for a significant portion of our total sales. See in Item 4.B below - "Business Overview".

Further, we engage in an additional field of activity as a result of our acquisition of the assets and certain liabilities of Printar in June 2009. Printar's two major fields of activity were: a functional ink technology (FIT) system for application of identification nomenclature on certain PCBs and designated ink (the "Legend System") and FIT system and designated solder mask ink for application during production of PCBs, which we evolved into the Gryphon System. We have ceased manufacturing Legend Systems, but still support an installed base of such 4 active systems as well as selling ink products used in such systems. In addition, as of August 2016, following our decision to reorganize our FIT activity mode of operation, we have also ceased commercialization of the Gryphon Systems, and are now focusing on developing the New FIT Product (See in Item 4.B below - "Business Overview – Our Business"). We believe that, if and when available, the New FIT Product and related technology may be used in the future for various applications in the field of electronic manufacturing.

In 2009 we also completed the acquisition of Sela, which was engaged in the development, manufacturing and marketing of automated SEM (Scanning Electron Microscope) and TEM (Transmission Electron Microscope) sample preparation equipment, primarily for the front end semiconductor industry. Sela developed the Xact, a TEM sample preparation tool using adaptive ion milling (AIM™) technology. The first Xact system was sold in the first quarter of 2009, and sales of this system continued in 2010 and until 2013. The second generation of the Xact was introduced in the fourth quarter of 2011. In the fourth quarter of 2013 the Company announced that other than sale and support of existing Xact products it will not continue with further development of its Xact product line. In the first quarter of 2015, the Company concluded a definitive agreement for the transfer of the Sela division activity (assets and liabilities) to a company fully owned by Sela's long time business manager, thereby effectively terminating any and all involvement of the Company in the Sela business (the "Sela Transaction").

In July 2000, we sold 5,835,000 ordinary shares in an initial public offering, in which we received net proceeds of approximately $35 million. In August 2002, we sold 5,926,730 ordinary shares in a rights offering of ordinary shares to our then existing shareholders (of which 5,922,228 shares were sold to Priortech), in which we received net proceeds of $6.1 million. On August 23, 2005 we raised $5 million as a convertible loan from FIMI Opportunity Fund L.P and FIMI Israel Opportunity Fund, Limited Partnership (FIMI), which amount was repaid in full by August 2010.

On April 30, 2006, we completed a private placement in which we issued 2,525,252 ordinary shares to Israeli institutional investors at a price of $5.94 per share, raising $14.5 million. In May 2015, we completed a public offering of our shares on Nasdaq in which we issued 4,655,982 shares at a price of $2.85 per share, raising net proceeds of $11.9 million.

For a discussion of capital expenditures, see Item 5.B below - "Operating and Financial Review and Prospects– Liquidity and Capital Resources."

B. Business Overview.

Our Business

Camtek Ltd. provides automated and technologically advanced solutions dedicated to enhancing production processes, increasing products yield and reliability, enabling and supporting customers' latest technologies in the semiconductor fabrication and PCB industries.

Camtek addresses the specific needs of these interconnected industries with dedicated solutions based on a wide and advanced platform of technologies including intelligent imaging, image processing and functional inkjet printing.

We design, develop, manufacture and market products mainly based on our core technology- AOI.

AOI systems optically inspect various types of electronic product components for defects caused during the manufacturing process. Our AOI systems are used to enhance both production processes and yields for manufacturers in the semiconductor mid-end and back-end industry as well as in the PCB industry. Our systems provide our customers with a high level of defect detection ability, are easy to operate and offer high productivity. Our AOI products incorporate proprietary advanced image processing software and algorithms, as well as advanced electro optics and precision mechanics. They are designed for easy operation and maintenance. In addition, our AOI systems use technology that enables our customers to handle a wide range of inspection and verification needs.

In addition, we are in the process of developing our New FIT Product; the main FIT product developed by us up to August 2016 was the Gryphon System. Since August 2016, following our ongoing market penetration efforts with the Gryphon System, we decided to cease supporting the four Gryphon Systems that were already installed at customer sites, and to re-focus on creating the New FIT Product, based on feedback gathered from the field by our FIT team in order to better design it in accordance with market requirements. The New FIT Product is being designed in a way that is supposed to enable us to provide our customers with a high performance one-step, environment-friendly, more accurate and relatively low-cost process for digital deposition of solder mask in comparison with current traditional analog process using artwork. If and when available, the New FIT Product and its proprietary technology will also enable us to offer our customers in the PCB industry a broader range of products, while relying on our existing operational, research and development, customer support and sales and marketing infrastructure.

Our global direct customer support organization provides responsive, localized pre- and post- sales support for our customers through our wholly-owned subsidiaries.

Our Markets

We target the semiconductor fabrication industry as well as the PCB industry, all part of the electronic packaging industries and the electronics supply chain.

The Semiconductor Industry

The semiconductor manufacturing industry produces integrated circuits on silicon wafers; each wafer contains numerous integrated dices containing electronic circuits which are functional devices. AOI is implemented at various stages along the manufacturing process at the front end, mid-end and the back end. Camtek serves the mid and back end of the process starting with probe mark inspection after the testing of the individual dice, inspecting the finished wafers for defects, inspecting and measuring the bumps and conducting post-dicing inspection. The surface inspection process looks for defects such as cracks, foreign materials or mechanical damage, and also ensures dimensional conformity, thus eliminating subsequent testing of defective products, increasing overall yield and reducing overall production costs.

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In the fast growing advanced packaging market segment, the integrated circuits are attached to a substrate via an array of bumps, rather than being wire bonded. Wafers designed for such assembly inter-connect go through a process in which bumps ranging from 2 to 300 microns in height, or gold bumps of about 15-20 microns tall, are plated or stenciled on pads on the face of the integrated circuits. Camtek's AOI systems equipped with 3-D measurement capabilities are used to detect any missing, misplaced or deformed bump and to determine bumps conformity to shape and height specifications. Size, shape and placement deviations may cause damage to the integrated circuit or the substrate during the packaging process, leading to device failure. Each wafer has several million bumps that need to be inspected and measured, and AOI is becoming crucial to the manufacturing process.

A fast growing segment is "micro-electro mechanical systems" ("MEMS") which mainly serves the mobile and automotive markets, utilizing materials, manufacturing technologies and facilities from the semiconductor industry to produce miniature mechanisms, such as inkjet print heads, accelerometers, image sensors, video projection devices, sensors and microphones. Many MEMS products are packaged between layers of glass while still at the wafer format, and diced in several steps afterwards. The MEMS manufacturing segment relies heavily on testing to ensure product performance and reliability. This testing may constitute a significant amount of the overall product cost. Camtek's AOI is implemented at various stages along the manufacturing process to detect cracks, foreign materials or mechanical damage, as well as to confirm dimensional conformity, thus eliminating subsequent testing of defective products, increasing yield and reducing overall production costs.

The complementary metal oxide semiconductor image sensors ("CIS") is another growing market segment used for mobile devices, automotive and security products. The requirements of this market call for a simultaneous increase in the number of pixels per each sensor and reduction in the size of each pixel, which requires the manufacturing process to have a high resolution inspection for every sensor. Camtek has developed customized capabilities to address these requirements and its AOI systems are being used by the main CIS manufacturers.

The PCB and Integrated Circuit Substrate Industry

A PCB is the basic platform that supports and interconnects a broad range of electronic components, such as integrated circuit devices, resistors, capacitors, coils and the like, and enables them to operate as an electronic system. PCBs consist of traces, or lines, of conductive material, such as copper, laminated on either a rigid or a flexible insulating base. These conductive lines provide electrical interconnections between the components. The trace integrity and conformance to exact dimensions are essential to the functioning of the electronic product. Imperfections in the various stages of the PCB manufacturing process may result in defects or flaws, like open conductive lines, electrical short circuits, nicks and inappropriate line widths.

The trend towards compact, high performance and highly reliable electronic products, such as mobile and smart phones, notebook computers, tablets and digital cameras, drives the demand for increased complexity and miniaturization of PCBs. In response to this demand, PCB manufacturers are producing multi layer PCBs with increasingly narrow and dense lines, as well as boards with higher layer counts. Multi layer boards consist of several layers of circuitry laminated together to form a single board with both horizontal and vertical electrical interconnections. In addition, multi layer boards are continuing to evolve with new technologies. Currently, high-end PCBs (excluding substrates) use conductive lines and spaces of 15 to 120 μm (microns). The scan time required to inspect a given PCBs surface increases substantially in relation to the reduction in line width.

The manufacturing process for multi layer boards is comprised of three stages: the manufacture of production tools, including artwork and masks; the production of inner layers and their lamination into a single board; and the production of external layers. The majority of AOI systems in the PCB industry are used for inspection of inner layers. Today, the number of inner layers in typical multi layer PCBs usually ranges from 4 to 14, though certain high layer-count boards may consist of as many as 52 layers. Inspection by AOI systems during the manufacturing process for the detection of defects in the inner layers prior to the lamination process is crucial so that any defective individual layers may be repaired or replaced while still accessible. Once the multi layer board is laminated, any undetected

defect in any specific layer will result in discarding the entire board.

Traditional solder mask application includes solder mask coating, in various methods, and photo imaging and is a five step process involving high production costs and time-consuming procedures. This process includes solder mask coating (in various methods) following by a drying stage, photo imaging step (exposure) followed by a development process and legend tiles printing (in various methods). If and when available, Camtek's New FIT Product will provide for a full digital manufacturing station for PCB solder mask and legend within the same process, allowing significant simplification of the solder mask process by the elimination of all the above steps due to its both FIT to Image alignment capabilities and direct deposition (by inkjet printing) of solder mask and legend tiles, which leads to faster cycle time and reduced operational costs.

The pursuit of electronic products that deliver more functionality, and at the same time are smaller, lighter and less power-consuming, drives the semiconductor industry to produce integrated circuits requiring more input/output connections. These dies must fit into smaller packages. The integrated circuit substrate industry, in turn, supports these trends with high-density interconnect substrates that serve as carriers for the integrated circuit dice, providing it mechanical and electrical connections to the PCB. These substrates feature conductive lines that are 5 to 25 μm (microns) in width. Although integrated circuit substrates are produced using technologies derived from those used for the production of traditional PCBs, the complexity and high density of these substrates require separate, specialized manufacturing facilities.

The die is connected to the upper side of the substrate, either by wire bonding by means of thin metal wires, or by "flipping" the integrated circuit and directly connecting conductive bumps on its face to a matching array of pads or bumps on the substrate. The latter technology is known as flip chip die attach ("Flip-Chip"). The die substrate is connected to the PCB via an array of conductive solder balls, known as a ball grid array.

The complexity of integrated circuit substrates requires advanced inspection systems with high magnification power for detecting minuscule defects that hinder production yields. Optical inspection of integrated circuit substrates is implemented along the manufacturing process, where the substrates are still in panel form, similar to PCBs, and at the end of the production process, where the substrates are cut to strips or packed in trays. Due to the high integration level of today's electronic products, defective substrates that pass un-detected may render the entire product unusable; if assembled in a mission-critical system, they may cause a catastrophic failure.

Product Lines

Our AOI systems consist of:

- An electro-optical assembly unit, either movable or fixed, which consists of a video camera, precision optics and illumination sources. The electro-optical unit captures the image of the inspected product;
- A precise, either movable or fixed table, that holds the inspected product; and
- An electronic hardware unit, which operates the entire system and includes embedded components that process and analyze the captured image by using our proprietary algorithms.

The inspected product is placed on a designated platform and is scanned under the optical assembly unit. The optical assembly unit then captures images of the product, while the electronic hardware unit processes the image using the analysis algorithms. Detected discrepancies are logged and reported as defects per the user preferences. The image of the defect is immediately available for verification by the system operator. Our systems can also compile and communicate statistical reports of inspection findings via the customer's factory information system.

We offer a broad range of systems for automated optical inspection of semiconductor wafers, integrated circuit substrates and PCBs. We invest significant resources in R&D to provide our customers with advantageous performance, low cost of ownership, high reliability and ease of operation. We believe that a significant part of our

competitive advantage and of our ability to adapt our technologies to evolving market needs comes from our design philosophy and applicable know-how in basing our products on software-intensive architectures.

AOI Systems for the Semiconductor Industry

Product	Function
	The Eagle product line is designed to support the mid-end semiconductor manufacturing sector.
Eagle	The Eagle AP system addresses the fast growing advanced packaging market, using state of the art technologies, both software and hardware, that deliver superior 2D and 3D inspection and metrology capabilities on the same platform. The advanced packaging market uses a wide spectrum of bump types and sizes. The Eagle AP meets the current and future requirements in inspection and metrology including measurement of bumps down to 2µm (microns) and providing high throughput.
Condor	The Condor is designed to meet the current inspection needs of the semiconductor industry. The Condor, through its state of the art algorithms and advanced hardware configuration, is designed to enhance the 2D and 3D detection abilities and increased throughput. The Condor includes 2D inspection and metrology abilities combined with 3D metrology capabilities such as bump, micro bump and through silicon via ("TSV") measurements.
Gannett	The Gannet system is designed for the front end market of the semiconductor industry. The Gannet's advanced algorithms and inspection capabilities enable it to detect defects in the die, which, if left undetected, may cause failure. In addition, inspection data can be used by customers to monitor and characterize several production processes.
Falcon	Our Falcon systems are principally designed for the back end market of the semiconductor industry. The Falcon's advanced algorithms and inspection capabilities enable its dedicated models to detect defects in the die, which, if left undetected, may cause failure. In addition, inspection data can be used by customers to monitor and characterize several wafer finishing processes, troubleshoot functional issues or control the integrity of the interconnect and perform various metrology tasks.

Eagle

The Eagle^{T}-i was introduced at Semicon Taiwan in September 2016; it is Camtek's most advanced system for 2D inspection, which provides superior performance especially in terms of throughput and inspection quality.

Both systems can be used for a wide variety of inspection steps including operational quality control, probe mark inspection, post dicing and reconstructed wafers and pre- and post- bumped wafers and both have high resolution optics, advanced image processing and algorithms, flexible software and multiple handling options.

We are currently finalizing the implementation of our decision from 2015 to focus our semiconductor activity on the Eagle platform only, and gradually phasing out all other product lines for this industry.

Yield Management Solution

Commencing as of 2017, Camtek includes certain software solutions developed by BISTel America Inc. as part of its Yield Management Solution (YMS) product portfolio. This new integrated yield management solution will include BISTel's advanced data analytic solutions, which we expect will provide a powerful tool to perform data mining, data analysis and root cause analysis in the semiconductor manufacturing industry.

AOI Systems for the PCB Industry

Our AOI products for this industry consist of six product lines: the Unicorn, Phoenix Fi, Phoenix, Dragon and Orion for the inspection of inner and outer layers of PCB panels and ultra-fine-line integrated circuit substrate, and large area masks ("Phoenix Photo Tool", formerly known as "LAM") dedicated for inspection of artwork.

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Unicorn

Introduced in 2016, the Unicorn product family is our latest automated visual inspection (AVI) system, designed for final inspection of IC Substrates strips with line/space down to 5 µm. The Unicorn AVI systems incorporate all Camtek's latest technologies that were specifically developed for ultra-high resolution AOI systems, as well as advanced optics, image acquisition and processing hardware and software. Unicorn systems are designed to meet the most sophisticated detection requirements of highly advanced IC Substrates makers, while scanning at high throughput and with minimum false calls. The Unicorn can reliably detect all types of defects on metal, solder mask on copper (SMC), solder mask on laminate (SML), legend and defects on traces under solder mask.

Phoenix Fi

Phoenix Fi is ideally suited for IC Substrate manufacturers who require an extra level of quality control for their boards after panelization (routing) process. It also saves manpower by reducing the need for visual inspection as well as eliminating possibilities of human error during such process.

Phoenix

The Phoenix product family, introduced in November 2011, is designed to support a broad range of the most demanding PCB and integrated circuit substrate applications, while keeping pace with the dynamic technology changes in the industry. It enables customers to increase AOI room total yield and offers high performance in all AOI aspects. Phoenix models are optimized for specific PCB technology ranges – from mainstream circuits of typically 50 µm (microns) conductor line width, up to high density substrates having 5 µm (microns) wide conductive lines. The Phoenix product family is enhanced with Spark, which is Camtek's unique and powerful detection engine that provides high detection capabilities, while minimizing false calls. Spark's open architecture software enables easy adaptation to new applications and technology and supports critical dimensions detection.

Dragon

Dragon systems are high-throughput, automation-ready systems for inspection of all PCB types in a mass production environment. Dragon models are optimized for specific PCB technology ranges, from mainstream circuits of typically 100 µm (microns) conductor line width, up to high density substrates having 12 µm (microns) wide conductive lines. All Dragon models are designed to interface with automated material handling mechanisms provided by us or other automation suppliers. We believe that the combination of detection ability, scanning speed, real-time data collection for process control and automated material handling deliver outstanding value to customers. Some models of the Dragon product family are enhanced with Spark. The Dragon was first introduced in March 2003.

Orion

Orion systems are stand-alone AOI systems for high volume inspection of all PCB types designed to operate in "Inspectify™" mode of operation. Inspectify™ is a unique mode of operation enabling the operator to perform verification immediately after inspection on the same system, thus saving time and eliminating handling-related defects. The Orion family has evolved gradually since its introduction in 1999. All Orion models retain an ergonomic user interface that supports high productivity and flexibility, allowing successive on-line inspection and verification, or solely inspection followed by off-line verification on a separate station. Like the Dragon family, Orion models are dedicated for various PCB technology ranges. Some models of the Orion product family are enhanced with Spark.

Phoenix Photo Tool (formerly known as LAM)

The Phoenix Photo Tool inspection system (the "Phoenix PT") is specially designed for Photolithography Mask inspection. It offers advanced detection ability on Phoenix PT with down to 10 µm (microns) line to space width

technology. The Phoenix PT incorporates advanced technology innovations to ensure the level of detection that these fine masks require at this critical production stage. Since large area masks are made of glass and transparent for light, the Phoenix PT contains specially designed image acquisition system, where the mask under inspection is located in between illumination sources and the digital camera.

Verification Systems

The CVR-100 is a stand-alone verification system designed for verification of panels after inspection on the Phoenix, Dragon or Orion AOI equipment.

Customers

Our customer base includes the majority of the largest PCB manufacturers worldwide and 23 semiconductor manufacturers, among them outsourced semiconductor assembly and test (OSAT), integrated device manufacturers and wafer level packaging subcontractors. Our customers, many of whom have multiple facilities, are located in 32 countries throughout Asia, Europe and North America. In 2016, 2015 and 2014, no individual customer accounted for more than 10% of our total revenues. In the integrated circuit substrate industry, our customers are typically dedicated substrate manufacturers, but also include large PCB manufacturers who have separate substrate manufacturing facilities. Our integrated circuit substrate customers are located predominantly in Taiwan and in the Asia Pacific region. In the semiconductor manufacturing industry, we target wafer manufacturers and companies involved in the testing, assembly and packaging of semiconductor devices.

The following table shows our revenues classified by geographical region for each of the last three years:

	Year Ended December 31,		
	2016	2015	2014
	U.S. Dollars (In thousands)		
China and Hong Kong	34,276	30,158	28,526
Taiwan	27,718	24,854	17,495
Korea	16,491	13,208	8,889
Asia – Other	11,214	7,836	11,336
United States	10,563	10,219	12,518
Western Europe	5,079	5,380	5,739
Japan	4,182	7,035	3,204
Rest of the world	-	585	606
Total	109,523	99,275	88,313

The following table shows our revenues classified by our sales to both industries for each of the last three years:

	Year Ended December 31,		
	2016	2015	2014
	U.S. Dollars (In thousands)		
Microelectronics	79,047	69,137	57,833
PCB	30,476	30,138	30,480
Total Revenues	109,523	99,275	88,313

Sales, Marketing and Customer Support

We have established a global distribution and support network throughout the territories in which we sell, install and support our products, including the Asia Pacific region, North America and Europe. We believe that this is an essential factor in our customers' decision to purchase our products. We primarily utilize our own employees to provide these customer support services. We may expand our network into additional territories as market conditions warrant.

In 2016, and earlier between 2011 to 2013, we signed several distribution rights agreements with different Japanese, European and North African companies, under which these companies sell, install and support our products in Japan, Europe and North Africa, respectively.

As of December 31, 2016, 226 of our employees were engaged in our worldwide sales, marketing and support efforts, including support and sales administration staff. Due to the concentration of sales in the Asia Pacific region, we have adjusted our sales organization accordingly, and significantly expanded our sales, marketing and support teams in this region.

Our marketing efforts include participation in various trade shows and conventions, publications and trade press, product demonstrations performed at our facilities and regular contact with customers by sales personnel. We generally provide a 12 month warranty to our customers. In addition, for a fee, we offer service and maintenance contracts commencing after the expiration of the warranty period. Under our service and maintenance contracts, we provide prompt on-site customer support.

We take various measures to secure customers' payment on a case by case basis by means of letters of credit and bank notes.

Manufacturing

Our manufacturing activities consist primarily of the assembly and integration of parts, components and subassemblies, which are acquired from third party vendors and subcontractors. The manufacturing process for our products generally lasts four to twelve weeks. We utilize subcontractors for the production of subsystems. Since the beginning of 2010 our Eagle, Falcon and Condor systems have been manufactured by a single Israeli contractor who performs most of the material planning, procurement, manufacturing, testing, assembly and packaging work with respect to these systems.

We rely on single source and limited source suppliers and subcontractors for a number of essential components and subsystems of our products. We generally maintain several months' of inventory of critical components used in the manufacture and assembly of our products. During times of rapid increase in demand in the semiconductor fabrication and PCB industries, the delivery time of suppliers in these industries is extended. However, to date, we have been able to obtain sufficient units of these components to meet our needs in a timely fashion.

We have two manufacturing facilities: one in Migdal Ha'Emek, Israel, and another one in Suzhou, China, in which we manufacture certain components and assemble most of our AOI systems for the PCB industry.

Competition

The markets in which we operate are highly competitive. In the semiconductor industry, our main competitors are Rudolph, ATI Electronics Pty Ltd., KLA-Tencor Corporation, Cheng Mei Instrument Technology Co., ASTI Holding Limited and Toray Industries Inc. In the PCB industry, our principal competitor is Orbotech Ltd., with additional competitors including Dainippon Screen Manufacturing Company, Gigavis Co. Ltd., Shirai Electronics Industrial Co. Ltd., ATI Electronics Pty Ltd. and local AOI vendors in China and Taiwan such as Machvision Inc., Optima Ltd., Ovitech and Jointpower Technology Co. Ltd.

We believe that the principal elements of a sustainable competitive advantage are:

- Ongoing research, development and commercial implementation of new image acquisition, processing and analysis technologies;

- Product architecture based on proprietary core technologies and commercially available hardware. Such architecture supports shorter time-to-market, flexible cost structure, longer service life and higher margins;

- Fast response to evolving customer needs;

- Ability to maintain competitive pricing;

- Product compatibility with customer automation environment; and

- Strong pre- and post-sale support (applications, service and training) deployed in immediate proximity to customer sites.

We believe that we compete effectively on all of these factors.

The Israel Innovation Authority, formerly – the Israeli Office of Chief Scientist

The Government of Israel encourages research and development projects in Israel through the Israel Innovation Authority, formerly and more commonly known as the Office of Chief Scientist (OCS), pursuant to and subject to the provisions of the R&D Law.

Under the R&D Law, research and development projects which are approved by the Research Committee of the OCS are eligible for grants, in exchange for payment of royalties from revenues generated by the products developed within the framework of such approved project and subject to compliance with certain requirements and restrictions under the R&D Law as detailed below, which must generally continue to be complied with even following full repayment of all OCS grants.

Under the R&D Law, in previous years prior to 2000 we applied for and were granted R&D grants. As a recipient of such grants we were required to pay the OCS royalties ranging between 3% to 5% (plus LIBOR interest). In March 2001, we commenced repayment of many of these grants pursuant to an understanding reached with the OCS. As of June 1, 2005, we had fully repaid all our previously received grants from the OCS at such time. Sela and Printar, from which we acquired businesses and assets, also received government grants from the OCS, prior to their acquisitions by us, for the financing of significant portion of their product development expenditures in previous years. As part of their respective acquisitions, we also assumed their liabilities to the OCS in connection with such grants. In January 2015, as part of the transfer of the Sela activity, all of Sela's outstanding liabilities to the OCS, which then amounted to $2.4 million, were assumed by the transferee. As of the date of this Annual Report, the amount of non-repaid grants received by Printar, together with additional grants which we received in 2009 in connection with Printar's research and development program (in the amount of $598,000), stands at $6.5 million. However, we do not believe that any payments will be made in respect of the foregoing Printar related grants, and have accordingly written off such liabilities, due to the fact that in 2016 we stopped supporting our previous line of FIT systems, developed based on the Printar technology, and re-focused on developing the New FIT Product (See in Item 4.B above - "Business Overview – Our Business").

The R&D Law generally requires that a product developed under a grant program be manufactured in Israel. However, upon the approval of the OCS, some of the manufacturing volume may be performed outside of Israel. Such approval may only be granted under various conditions, such as the repayment of increased royalties, in an amount equal to up to 300% of the total grant amount, plus applicable interest, or an increase of 1% in the royalty rate, depending on the extent of the manufacturing that is to be conducted outside of Israel.

In 2010, a dispute arose between us and the OCS regarding repayment of an unspecified increased amount of grants pertaining to certain of our products, the manufacturing and assembly of which has been moved to a foreign subsidiary. Based, among other matters, on the nature and/or quantities of products manufactured or assembled by our foreign subsidiary, and in conjunction with the opinion of our legal advisors, we believe that the probability that we will be required to pay this amount is less than 50%. Accordingly, no provision has been recorded in our financial statements in respect of this matter.

The R&D Law also provides that know-how developed with funds received from the OCS and any right derived therefrom may not be transferred to third parties, unless such transfer was approved in accordance with the R&D Law. The research committee operating under the OCS may approve the transfer of know-how between Israeli entities, provided that the transferee undertakes all the obligations in connection with the R&D grant as prescribed under the R&D Law. In certain cases, such research committee may also approve a transfer of know-how outside of Israel, in both cases subject to the receipt of certain payments, calculated according to a formula set forth in the R&D Law, in amounts of up to six times the total amount of the grants plus applicable interest (in case of transfer outside of Israel), and three times of such total amount (in case the R&D activity related to the know-how remains in Israel). Such approvals are not required for the sale or export of any products resulting from such R&D activity.

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The R&D Law has been amended effective as of January 1, 2016. Under the amendment, a new Israel Innovation Authority has been established and is in charge of implementing the governmental policy regarding the R&D Law (and has been given discretion in the implementation of the R&D Law for such purpose). However, and until prescribed otherwise, the existing provisions relating to the transfer of knowhow and manufacturing outside of Israel, as detailed above, shall remain in full force and effect with respect to benefits and funding approved or received prior to such date.

For a discussion of the effects of Israeli governmental regulations and our operation in Israel on our business, see in item 3.D above "Risks relating to our Operations in Israel".

Capital Expenditures

The following table shows our capital expenditures in fixed assets for the last three years:

	December 31,		
	2016	2015	2014
	(U.S. Dollars in thousands)		
Building and leasehold improvements	434	616	61
Machinery and equipment*	2,610	1,444	410
Office furniture and equipment	94	69	65
Computer equipment and software	510	429	336
Vehicle	-	87	-
Total	$ 3,648	$ 2,645	$ 872

* including transfer of inventory to fixed assets in the aggregate of $2,313,000, $847,000 and $309,000 in 2016, 2015 and 2014, respectively.

Material Effects of Governmental Regulations

The following EU directives, which represent the European standard required in order to sell in Europe, apply to our business: Machinery Directive 2006/42/EC and EMC 2004/108/EC. The following SEMI Standards, which define uniform standards for manufacturers in the semiconductor fabrication industry and production equipment producers, apply to us: SEMI S-2 (safety requirements for sale of equipment in the semiconductor fabrication) and SEMI S-8 (ergonomic requirements for sale of equipment in the semiconductor fabrication industry). We comply with the above-mentioned governmental regulations during the systems' design process, which is conducted in accordance with the Company's quality assurance manual ISO9001:2008. In addition, all modules of systems are tested by independent laboratories that certify their compliance with these governmental regulations and have required accreditation.

C. Organizational Structure

Through its affiliated companies, our principal shareholder, Priortech, engages in various aspects of electronic packaging, including the production and assembly of PCBs and the development and sale of integrated circuit substrates. Based on sales, PCB Technologies Ltd., a subsidiary of Priortech, is one of the largest PCB manufacturers in Israel. Priortech currently holds 46.17% of our outstanding ordinary shares. Our revenues from sales to affiliates and subsidiaries of Priortech totaled $145,000, $109,000 and $297,000 in 2016, 2015 and 2014, respectively. In addition to these sales of products, we act jointly with Priortech with regard to various governmental, administrative and commercial matters, which we believe is to the advantage of both parties.

The following table shows the Company's subsidiaries, all of which are wholly owned by us or by our subsidiaries (except for Camtek HK Ltd., in which Priortech holds no more than one percent of the voting rights), together with each subsidiary's jurisdiction of incorporation, as of the date of this report:

Name of Subsidiary	Jurisdiction of Incorporation
Camtek H.K. Ltd.	Hong Kong
Camtek USA Inc.	New Jersey, USA
Camtek (Europe) NV	Belgium
Camtek Germany GmbH	Germany
Camtek Imaging Technology (CIT)	China
SELA - Semiconductor Engineering Laboratories Ltd*	Israel
Camtek Japan Ltd.	Japan
Camtek Taiwan Ltd.	Taiwan
Camtek South East Asia Pte ltd.	Singapore
Camtek Korea Ltd.	South Korea
Penta-I Ltd.	Israel

*As of January 2015 no longer active – see in Item 4.A above – "History and Development of the Company".

D. Property, Plants and Equipment

Our main office, manufacturing and research and development facilities are located in the Ramat Gavriel Industrial Zone of Migdal Ha'Emek in northern Israel. These facilities occupy 74,000 square feet of which 16,000 square feet are devoted to the manufacturing of our products. In addition, in 2017 the Company has commenced a project for the expansion of such facilities by approximately an additional 10,500 square feet. In accordance with agreements signed in 2010 and 2011 with Bank Leumi L'Israel and in 2011 with Bank Mizrahi, a lien has been placed on these facilities.

We also lease a manufacturing facility in Suzhou, China, in which we manufacture certain components and assemble most of our AOI systems for the PCB industry. The Chinese facility occupies 53,500 square feet.

Our sales offices and demonstration centers, which we lease in various locations around the world, occupy an aggregate of approximately 33,200 square feet.

Aggregate office rent expenses in 2016 amounted to approximately $966,000.

Item 4A. Unresolved Staff Comments

None.

Item 5. Operating and Financial Review and Prospects.

A. Operating Results

General

The following discussion of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and the notes to those statements included therein, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP.

Segment Information

The Company's segment information has been prepared in accordance with ASC 280, "Segment Reporting." Operating segments are defined as components of an enterprise engaging in business activities about which separate financial information is available and such information is evaluated regularly by the Company's chief operating decision-maker (the "CODM") in deciding how to allocate resources and assess performance. The Company's CODM is its Chief Executive Officer, who evaluates the Company's performance and allocates resources based on segment revenues and operating income.

The Company's reportable segments are as follows: semiconductor fabrication industry ("Microelectronics Segment") and PCB industry ("PCB Segment").

Microelectronics Segment: The semiconductor fabrication industry produces integrated circuits on silicon (or other semiconductor materials) wafers; each wafer contains numerous integrated circuits dices which are small block of semiconducting material on which a given functional circuit is fabricated.

PCB Segment: A PCB is the basic platform that supports and interconnects a broad range of electronic components, such as integrated circuit devices, resistors, capacitors, coils and the like, and enables them to operate as an electronic system. PCBs consist of traces, or lines, of conductive material, such as copper, laminated on either a rigid or a flexible insulating base.

Overview

We design, develop, manufacture and market automated solutions dedicated for enhancing production processes and yield for the semiconductor fabrication and PCB industries, principally based on our core technology, AOI. In addition, we are in the process of developing our New FIT Product; see in Item 4.B above "Business Overview- Our Business".

We sell our systems internationally. The majority of sales of our systems in 2016 were to manufacturers in the Asia Pacific region, including China, South East Asia, Korea and Taiwan, due to, among other factors, the migration of the electronic manufacturers into this region following the development and growth of electronics industry centers.

In 2016, our sales to customers in the Asia Pacific region accounted for approximately 85% of our total revenues, including approximately 31% of our total revenues from sales in China and Hong Kong, 25% in Taiwan and 15% in Korea. We expect the major portion of our revenues to continue to come from customers in the Asia Pacific region in the foreseeable future

In addition to revenues derived from the sale of systems and related products, we generate revenues from providing maintenance and support services for our products. We generally provide a one-year warranty with our systems. Accordingly, service revenues are not earned during the warranty period.

In regular market conditions, the demand for our systems is characterized by short notice. To meet customers' needs for quick delivery and to realize the competitive advantage of the ability to do so, we have to pre-order components and subsystems based on our forecast of future orders, rather than on actual orders. This need is compounded by the fact that, in times of increasing demand in our markets, our suppliers and subcontractors tend to extend their delivery schedules or fail to meet their delivery deadlines. To compensate for these unscheduled delays, we build inventories further into the future, which increases the risk that our forecast may not correspond to our actual future needs. The uncertainties involved in these longer-term estimates during regular times of business expansion tend to increase the level of component and subsystem inventories (See also in Item 3 above - "Risk Factors - Longer sales process for new products may increase our costs and delay time to market of our products both of which may negatively impact our inventory and results of operations" and under Item 5.A below - "Critical Accounting Policies - Valuation of

Inventory"). Compared to our sales cycles for repeat orders from existing customers, we have longer sales cycles for new customers in our markets as well as for new customers in new markets. In addition, the selling cycle in our markets may typically take several quarters from first contact to revenue recognition, including on-site evaluation. Naturally, repeat orders take less time. Still, a significant portion of our finished goods inventory consists of systems under evaluation and demonstration systems.

Critical Accounting Policies

Critical accounting policies are those that, in management's view, are most important to the portrayal of a company's financial condition and results of operations and most demanding on their calls on judgment, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. We believe our most critical accounting policies relate to:

Revenue Recognition. The Company recognizes revenue from sales of its products when the products are installed at the customer's premises and are operating in accordance with their specifications, signed documentation of the arrangement, such as a signed contract or purchase order, has been received, the price is fixed or determinable and collectability is reasonably assured. In the limited circumstances when the products are installed by a trained distributor acting as an end user, revenue is recognized upon delivery to the distributor assuming all other criteria for revenue recognition are met.

Our revenue recognition policy requires that we use judgment to determine whether collectability is reasonably assured. Judgment is used for each customer on a case-by-case basis, and, among other factors, we take into consideration the individual customer's payment history and its financial strength, as demonstrated by its financial reports or through a third party credit check. In some cases, we secure payments by a letter of credit or other instruments.

Service revenues consist mainly of revenues from maintenance contracts and are recognized ratably over the contract period.

We apply ASU 2009-13, Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements, and therefore for multiple-element arrangements the overall arrangement fee is allocated to each element (both delivered and undelivered items) based on management's best estimate of their selling price where other sources of evidence are unavailable. The revenue relating to the undelivered elements is deferred using the relative selling price method utilizing vendor-specific-objective evidence ("VSOE") until delivery of the deferred elements.

Our multiple deliverables usually consist of product sales and non-standard warranties. A non-standard warranty is one that is for a period longer than 12 months. Accordingly, a non-standard warranty is deferred as unearned revenue and is recognized ratably as revenue commencing with and over the applicable warranty term.

We routinely evaluate our products for inclusion of any embedded software that is more than incidental thereby requiring consideration of ASC Subtopic 985-605, "Software Revenue Recognition". Based on such evaluation, we concluded that none of our products have such embedded software.

Valuation of Accounts Receivable. We review accounts receivable to determine which are doubtful of collection. In making this determination of the appropriate allowance for doubtful accounts, we consider information at hand regarding specific customers, including aging of the receivable balance, evaluation of the security received from customers, our history of write-offs, relationships with our customers and the overall credit worthiness of our customers. Changes in the credit worthiness of our customers, the general economic environment and other factors may impact the level of our future write-offs.

Valuation of Inventory. Inventories consist of completed systems, partially completed systems and components, and are recorded at the lower of cost, determined by the moving – average basis, or market. We review inventory for obsolescence and excess quantities to determine that items deemed obsolete or excess inventory are appropriately reserved. In making the determination, we consider forecasted future sales or service/maintenance of related products and the quantity of inventory at the balance sheet date, assessed against each inventory item's past usage rates and future expected usage rates. Changes in factors such as technology, customer demand, competing products and other matters could affect the level of our obsolete and excess inventory in the future.

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In the years 2016, 2015 and 2014 we wrote-off inventory in the amount of approximately $4.8 million, $1.2 million and $0.5 million, respectively. The write off amounts are included in the item line called "Cost of revenues", in the consolidated statements of operations. The write offs create a new cost basis and are a permanent reduction of inventory cost. The write-off in the amount of approximately $4.8 million in 2016 related to our decision to reorganize our current mode of operation with respect to our FIT activity; the write-off in the amount of approximately $1.2 million in 2015 related to FIT product line and slow moving inventory. Inventory that is not expected to be converted or consumed in 2017 is classified as non-current. As of December 31, 2016, a $2.1 million portion of our inventory was classified as non-current. Management periodically evaluates our inventory composition, giving consideration to factors such as the probability and timing of anticipated usage and the physical condition of the items, and then estimates a charge (reducing the inventory) to be provided for slow moving, technologically obsolete or damaged inventory. These estimates could vary significantly from actual requirements based upon future economic conditions, customer inventory levels or competitive factors that were not foreseen or did not exist when the inventory write-offs were established.

Intangible assets. Patent registration costs are capitalized at cost and amortized, beginning with the first year of utilization, over its expected life of ten years.

Intangible assets as part of a business combination are recorded at their fair value and amortized based on their estimated revenue producing life span. Acquired in-process research and development is amortized starting at the initial date of recording revenues from the associated technology. We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the long lived asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized as computed by subtracting the fair market value of the asset from its carrying value. In 2015, based on the Company's annual impairment tests, we recorded an impairment of intangible assets in the amount of $40,000, related to the Printar acquisition, representing the entire remaining goodwill and intangible assets related to the Printar acquisition. (See in Item 5.A, Note 10, below – "Goodwill" and Intangible Assets, Net", of the consolidated financial statements).

Goodwill. Goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. Goodwill is reviewed for impairment at least annually in accordance with the provisions of ASC Topic 350, Intangibles - Goodwill and Other (Statement No. 142, Goodwill and Other Intangible Assets). We have set our annual impairment testing date at December 31. The goodwill impairment test is a two-step test. Under the first step, the fair value of the reporting unit is compared with its carrying value (including goodwill). If the fair value of the reporting unit is less than its carrying value, an indication of goodwill impairment exists for the reporting unit and the enterprise must perform step two of the impairment test (measurement). Under step two, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation and the residual fair value after this allocation is the implied fair value of the reporting unit goodwill. Fair value of the reporting unit is determined using a discounted cash flow analysis. If the fair value of the reporting unit exceeds its carrying value, step two does not need to be performed. This requires significant judgments including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term rate of growth for our reporting units, the period over which cash flows will occur and determination of our weighted average cost of capital. Changes in these estimates and assumptions could materially affect the determination of fair value and/or goodwill impairment for each reporting unit (See also in Item 5.A, Note 10, above "Intangible assets").

Provisions for contingent liabilities. A contingency (provision) in accordance with ASC Topic 450-10-05, Contingencies, is an existing condition or situation involving uncertainty as to the range of possible loss to the entity. A provision for claims is recognized if it is probable (likely to occur) that a liability has been incurred and the amount can be estimated reasonably. Provisions in general are highly judgmental, especially in cases of legal disputes. We

assess the probability of an adverse event if the probability is evaluated to be probable, we are required to fully provide for the total amount of the estimated contingent liability. We continually evaluate our pending provisions to determine if accruals are required. It is often difficult to accurately estimate the ultimate outcome of a contingent liability. Different variables can affect the timing and amount we provide for certain contingent liabilities. Our assessments are therefore subject to estimates made by us and our legal counsel, adverse revision in our estimates of the potential liability could materially impact our financial condition, results of operations or liquidity.

Valuation of Long Lived Assets. We apply ASC Subtopic 360-10, "Property, Plant and Equipment". This Statement requires that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the long lived asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized as computed by subtracting the fair market value of the asset from its carrying value. We prepare future cash flows based on our best estimates including projections and financial statements, future plans and growth estimates.

Income Taxes. We account for income taxes under ASC Subtopic 740-10 Income Taxes – Overall. Deferred tax assets or liabilities are recognized in respect of temporary differences between the tax bases of assets and liabilities and their financial reporting amounts as well as in respect of tax losses and other deductions which may be deductible for tax purposes in future years, based on tax rates applicable to the periods in which such deferred taxes will be realized. The rates applied are those enacted in law as of December 31, 2016. In assessing the realizability of deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible and during which the carry-forwards are available. Valuation allowances are established when necessary to reduce deferred tax assets to the amount considered more likely than not to be realized.

Our financial statements include deferred tax assets, net, which are calculated according to the above methodology. If there is an unexpected critical deterioration in our operating results and forecasts, we would have to increase the valuation allowance with respect to those assets. We believe that it is more likely than not that those net deferred tax assets included in our financial statements will be realized in subsequent years.

Stock Option and Restricted Share Plans. We account for our employee stock-based compensation awards in accordance with ASC Topic 718, Compensation - Stock Compensation. ASC Topic 718 requires that all employee stock based compensation is recognized as a cost in the financial statements and that for equity-classified awards such cost is measured at the grant date fair value of the award. We estimate grant date fair value using the Black Scholes-Merton option pricing model. When calculating this equity-based compensation expense we took into consideration awards that are ultimately expected to vest. Therefore, this expense has been reduced for estimated forfeitures.

Recently Issued and Adopted Accounting Standards and Interpretations

In April 2014, the FASB issued ASU 2014-08, "Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity." ASU 2014-08 changes the requirements for reporting discontinued operations. This ASU limits discontinued operations reporting to disposals of components of an entity that represent strategic shifts that have a major effect on an entity's operations and financial results. The Company elected to early adopt this ASU as of January 1, 2014. Accordingly, Sela division is not presented as a discontinued operation.

New standards not yet adopted

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers." ASU 2014-09 is a comprehensive new revenue recognition model that requires a company to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for annual reporting periods, and interim periods within that period, beginning after December 15, 2016 and early adoption is not permitted. Companies may use either a full retrospective or a modified retrospective approach to adopt ASU 2014-09.

The Company does not expect the adoption of ASU 2014-09 will have a material effect on its Consolidated Financial Statements.

In July 2015, the FASB issued ASU No. 2015-11, “Simplifying the Measurement of Inventory”. The new guidance requires entities to measure inventory at the lower of cost or net realizable value. Net realizable value is defined by the guidance as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The guidance is effective for the interim and annual periods beginning on or after December 15, 2016 (early adoption is permitted). The Company does not expect the adoption of ASU 2015-11 will have a material effect on its Consolidated Financial Statements.

In November 2015, the FASB issued ASU No. 2015-17, “Balance Sheet Classification of Deferred Taxes”. ASU 2015-17 requires entities to present all deferred tax assets and liabilities, along with any related valuation allowance, as non-current on the balance sheet. The guidance is effective for interim and annual periods beginning after December 15, 2016 (early adoption is permitted). The Company does not expect the adoption of ASU 2015-17 will have a material effect on its Consolidated Financial Statements.

In February 2016, the FASB issued ASU No. 2016-02 “Leases”. ASU 2016-02 established a comprehensive new lease accounting model. The new standard clarifies the definition of a lease, requires a dual approach to lease classification similar to current lease classifications, and causes lessees to recognize leases on the balance sheet as a lease liability with a corresponding right-of-use asset for leases with a lease term of more than twelve months. The new standard is effective for interim and annual periods beginning after December 25, 2018. Early adoption is permitted. The new standard requires a modified retrospective transition for capital or operating leases existing at or entered into after the beginning of the earliest comparative period presented in the financial statements, but it does not require transition accounting for leases that expire prior to the date of initial application. The Company has not yet determined the potential effects of the adoption of ASU 2016-02 on its Consolidated Financial Statements.

In January 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. ASU 2016-1, among other things, (i) requires equity investments, with certain exceptions, to be measured at fair value with changes in fair value recognized in net income, (ii) simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment, (iii) eliminates the requirement for public business entities to disclose the methods and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet, (iv) requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes, (v) requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments, (vi) requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset on the balance sheet or the accompanying notes to the financial statements and (viii) clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale. The ASU will take effect for fiscal years beginning after December 15, 2017. Management is currently assessing the potential impact of adopting this guidance on the Company’s consolidated financial statements.

In March 2016, FASB issued guidance on stock compensation. The guidance is intended to simplify several aspects of the accounting for share-based payments, including income tax consequences, classification of awards as either equity or liabilities, and classification in the statement of cash flows. The guidance will be effective for fiscal years beginning after December 15, 2016, including interim periods within that year. The Company does not expect the adoption of ASU 2016-09 will have a material effect on its consolidated financial statements.

In August 2016, FASB issued ASU 2016-15, Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments, which is intended to provide specific guidance on the various cash flow classification issues. The guidance is effective for fiscal years beginning after December 15, 2017, and early adoption is permitted for all entities. Management is currently assessing the potential impact of adopting this guidance on the Company’s consolidated financial statements.

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Comparison of Period to Period Results of Operations

The following table presents consolidated statement of operations data for the periods indicated as a percentage of total revenues:

	Year Ended December 31		
	2016	2015	2014
Total Revenues	100.00%	100.0%	100.0%
Total Cost of revenues (*)	59.87 %	56.6 %	53.6 %
Gross profit	40.13 %	43.4 %	46.4 %
Operating expenses:			
Research and development costs	14.51 %	15.0 %	16.3 %
Selling, general and administrative expenses	23.3 %	23.8 %	24.3 %
Reorganization and impairment (costs)	3.71 %	(0.1)%	0.00 %
Loss from litigation	0.00 %	14.7 %	0.00 %
Total operating expenses	34.09 %	53.5 %	40.6 %
Operating income (loss)	6.04 %	(10.1)%	5.8 %
Financial income (expenses), net	(0.91)%	(1.9)%	(1.4)%
Income tax (expenses) benefit	(0.81)%	1.8 %	(0.7)%
Net income (loss)	4.32 %	(10.2)%	3.8 %

(*) 2016 includes reorganization and impairment equal to 4.50% of revenues

Year Ended December 31, 2016 compared to Year Ended December 31, 2015

Revenues. Revenues increased by 10% to $109.5 million in 2016 from $99.3 million in 2015. Sales of all products increased by 14% to $95.7 million in 2016 from $84.1 million in 2015.

In 2016, product sales to the PCB Segment increased by 7% and product sales to the Microelectronics Segment increased by 16%, compared to previous year. Within the Microelectronics Segment, AOI-related product revenues increased by 18% compared to previous year, from $63.4 million to $74.8 million, while Sela-related product sales decreased by 100%, from $1.1 million in 2015 to $0 in 2016 (due to the fact that the Sela products sold during 2015 were the last remaining products in our inventory), considering the termination of our involvement in the Sela business).

Service fees decreased by 9% to $13.8 million in 2016 from $15.2 million in 2015. The decrease in service fees was mainly a result of a decrease on service contracts in the PCB Segment.

Gross Profit. Gross profit consists of revenues less cost of revenues, which includes the cost of components, production materials, labor, depreciation, factory and service center overheads and provisions for warranties. These expenditures are only partially affected by sales volume. Our total gross profit increased to $44.0 million in 2016 from $43.1 million in 2015, an increase of $0.9 million, or 2%. Our gross margin decreased to 40.1% in 2016, compared to a gross margin of 43.4% in 2015, due to the effect of the FIT reorganization cost reflected in cost of revenues. In 2016 we reported an inventory write-off in the amount of approximately $4.8 million compared with an inventory write-off in the amount of approximately $1.2 million reported in 2015, with respect to the discontinuation of the previous generation FIT product line (the Gryphon Systems). Our gross profit on product sales increased by $7.1 million - to $46.3 million in 2016 from $39.2 million in 2015. Our gross profit on service revenue decreased by $1.4 million - to $2.5 million in 2016 from $3.9 million in 2015, primarily due to decreased service revenue.

Research and Development Costs. Research and development expenses consist primarily of salaries, materials consumption and costs associated with subcontracting certain development efforts. Total research and development expenses for 2016 increased to $15.9 million from $14.9 million in 2015 due to increased activity.

Selling, General and Administrative Expenses. Selling, general and administrative expenses consist primarily of expenses associated with salaries, commissions, promotion and travel, professional services and rent costs. Our selling, general and administrative expenses increased by 8% to $25.5 million in 2016 from $23.6 million in 2015, mainly due to an increase in agents' commissions and in professional services, out of which approximately $1.4 million were related to our legal proceedings with Rudolph in 2016.

Reorganization and impairment. During 2016 we recognized net income of $4.1 million regarding Printar, consisting of impairment charges of $0.9 million in respect of Printar-related fixed assets and other expenses, which was offset by income of $5.0 million from the write-off of OCS liabilities. During 2015, impairment charges of $0.1 million were recognized related to Printar impairment charges in respect of goodwill and other intangible assets, offset by renegotiation of the liability to the shareholders of Printar. For more information regarding the agreement with Printar see Item 4 above – "History and Development of the Company".

Financial Expenses, Net. We had net financial expense of $1.0 million in 2016, compared to net financial expense of $1.9 million in 2015. These changes mainly relate to foreign currency expense, net and interest on the bond posted with the United States Court of Appeals in connection with the Rudolph patent litigation (see in Item 8.A – "Consolidated Statements and Other Financial Information – Legal Proceedings"). Foreign currency expense, net, resulting from transactions not denominated in U.S. Dollars, amounted to $0.4 million in 2016 compared to $0.8 million in 2015.

Provision for Income Taxes. Income tax expense was $0.9 million in 2016 and we recorded a $1.8 million benefit in 2015; the increase in tax expense was mainly attributed to the creation of deferred tax assets in respect of the loss from litigation.

Net Income (Loss). We realized a net income of $4.7 million in 2016 compared to a net loss of $10.1 million in 2015, due to the reserve of $14.6 million recorded in the Company's consolidated financial statements for 2015 in connection with the Rudolph patent litigation (see in Item 8.A – "Consolidated Statements and Other Financial Information – Legal Proceedings").

Year Ended December 31, 2015 compared to Year Ended December 31, 2014

Revenues. Revenues increased by 12% to $99.3 million in 2015 from $88.3 million in 2014. Sales of all products increased by 18% to $84.1 million in 2015 from $71.4 million in 2014.

In 2015, product sales to the PCB Segment increased by 1% and product sales to the Microelectronics Segment increased by 24%, compared to previous year. Within the Microelectronics Segment, AOI-related product revenues increased by 24% compared to previous year, from $51.1 million to $63.4 million, while Sela-related product sales increased by 26%, from $0.9 million to $1.1 million. The Sela products sold during 2015 were the last remaining products in our inventory, considering the termination of our involvement in the Sela business.

Service fees decreased by 10% to $15.2 million in 2015 from $16.9 million in 2014. The decrease in service fees was mainly a result of the termination of our involvement in the Sela business.

Gross Profit. Our total gross profit increased to $43.1 million in 2015 from $41 million in 2014, an increase of $2.1 million, or 5%. Our gross margin decreased to 43.4% in 2015, compared to a gross margin of 46.4% in 2014, partly due to the combination of products sold. In addition, in 2015 we reported an inventory write-off in the amount of approximately $1.2 million compared with an inventory write-off in the amount of $0.5 million reported in 2014,

mostly with respect to one-color Gryphon products from the FIT product line. Our gross profit on product sales increased by $3.7 million - to $39.2 million in 2015 from $35.5 million in 2014. Our gross profit on service revenue decreased by $1.6 million - to $3.9 million in 2015 from $5.5 million in 2014, primarily due to decreased service revenue.

Research and Development Costs. Total research and development expenses for 2015 increased to $14.9 million from $14.4 million in 2014.

Selling, General and Administrative Expenses. Our selling, general and administrative expenses increased by 10% to $23.6 million in 2015 from $21.4 million in 2014, mainly due to an increase in agents' commissions and in professional services.

Reorganization and impairment. During 2015 impairment charges of $1.6 million were recognized in respect of Printar-related goodwill and intangible assets. This was offset by an income of $1.4 million related to the agreement settling our obligation to Printar. As of January 2015 we ceased all active involvement in the Sela business pursuant to the Sela Transaction. For more information regarding the agreement with Printar and the cessation of the Sela activity see Item 4 – "History and Development of the Company".

Loss from litigation. On February 3, 2016, the United States Court of Appeals for the Federal Circuit entered its judgment regarding the Company's appeal in the patent infringement case of Rudolph against the Company regarding the Falcon systems. The Company had recorded a reserve of $14.6 million for the awarded amount in our consolidated financial statements for 2015.

Financial Expenses, Net. We had net financial expense of $1.9 million in 2015, compared to net financial expense of $1.2 million in 2014. These changes mainly relate to interest on the bond posted with the United States Court of Appeals in connection with the Rudolph patent litigation (see in Item 8.A – "Consolidated Statements and Other Financial Information – Legal Proceedings"). Foreign currency expense, net, resulting from transactions not denominated in U.S. Dollars, amounted to $0.8 million in 2015 compared to $0.5 million in 2014.

Provision for Income Taxes. Income tax benefit (expense) was $1.8 million in 2015 and $(0.6 million) in 2014; the increase is mainly attributed to the creation of deferred tax assets in respect of the loss from litigation.

Net Income (Loss). We realized a net loss of $10.1 million in 2015 compared to a net income of $3.3 million in 2014, in light of the factors discussed above.

B. Liquidity and Capital Resources

At December 31, 2016, our cash and cash equivalent balances totaled approximately $19.7 million. At December 31, 2015, our cash and cash equivalent balances totaled approximately $30.8 million, in addition to $7.9 million which was classified as short term restricted deposits. The year-to-year deduction in cash, cash equivalents and short-term restricted deposits mainly results from the satisfaction in 2016 of the judgment and interest in the Rudolph patent litigation that we recorded as a liability in the year ended December 31, 2015. Our cash is invested in bank deposits spread among several banks, primarily in Israel.

From our inception through December 31, 2016 we raised approximately $36.0 million from our initial public offering in 2000, approximately $6.1 million in a rights offering of ordinary shares to our then existing shareholders in 2002, $14.5 million from a private placement to Israeli institutional investors in 2006, $5.0 million as a convertible loan from FIMI Opportunity Fund, L.P. and FIMI Israel Opportunity Fund, L.P. (all of which was paid in three equal portions in 2008, 2009 and 2010), and $11.9 million in a public offering of our shares in May 2015.

Our working capital was approximately $53.6 million in 2016 and $53.2 million in 2015. The increase is mainly attributed to the increase in accounts receivable, net and the decrease in other current liabilities, offset by the decrease in cash and cash equivalents and short-term restricted deposits.

Our capital expenditures during 2016 were approximately $1.6 million, mainly due to operating activities.

We anticipate that our existing capital resources and cash flows from operations will be adequate to satisfy our liquidity requirements for at least the next 12 months. If available liquidity is not sufficient to meet our operating obligations as they come due, our plans include pursuing alternative financing arrangements or reducing expenditures

as necessary to meet our cash requirements (see also in Item 3 above "We have incurred major losses in past years and may not sustain profitable operations in the future. Moreover, if our business deteriorates, we could face liquidity problems" under "Risk Factors").

Cash flow from operating activities

Net cash and cash equivalents provided by (used in) operating activities for the years ended December 31, 2016, 2015 and 2014 totaled $(17.3 million), $1.5 million and $6.0 million, respectively.

During 2016, cash (used in) operating activities was primarily attributed to net income of $4.7 million, adjusted to exclude the effect of an decrease in trade accounts payable of $1.2 million and of other current liabilities of $2.2 million, offset by the payment of $14.6 million relating to the Rudolph patent litigation, an increase in trade accounts receivable of $9.0 million, and the write off of liabilities to the OCS of $4.8 million.

During 2015, cash provided by operating activities was primarily attributed to a net loss, adjusted to exclude the effect of non-cash charges of $14.6 million relating to the Rudolph patent litigation, an increase in inventory of $4 million, and an increase of trade accounts payable of $2.3 million, partially offset by an increase in trade accounts receivable of $4.7 million, the revaluation of contingent liabilities and interest expenses on liabilities to the OCS of $0.9 million and an increase in deferred tax benefit of $2.4 million.

During 2014, cash provided by operating activities was primarily attributed to a net income of $3.3 million, a decrease in trade accounts receivable of $5.2 million and an increase in trade accounts payable of $1.7 million, partially offset by an increase in inventory of $5.9 million.

Cash flow from investing activities

Cash flow provided by investing activities in 2016 was $6.2 million, due to release from short term deposits of $7.9 million offset by investment of $1.6 million in fixed and intangible assets. Cash flow used in investing activities in 2015 was $0.4 million, primarily due to investment of $1.9 million in fixed and intangible assets offset by $1.4 million released from short term deposits. Cash flow used in investing activities in 2014 was $3.3 million, primarily due to investment in short term deposits.

Our capital expenditures in 2016 were used primarily for investment in electronic equipment, machinery and a new clean room in our facility in Israel. Our capital expenditures in 2015 were used primarily for investment in electronic equipment, machinery and a new clean room in our facility in Israel.

Cash flow from financing activities

Cash flow used in financing activities in 2016 was $0.

Cash flow provided by financing activities in 2015 was $11.8 million, mainly due to the public offering of our shares in May 2015.

Cash flow used in financing activities in 2014 was $0.3 million, mainly due to the repayment of contingent liability and payment to the OCS, offset by proceeds from exercise of share options.

Effective Corporate Tax Rate

Camtek's production facility in Israel has been granted "Approved Enterprise" status under the Investment Law (as defined in Item 10 below). We participate in the Alternative Benefits Program and, accordingly, income from our Approved Enterprise will be tax exempt for a period of 10 years, commencing on the first year in which the Approved Enterprise first generates taxable income, due to the fact that we operate in Zone "A" in Israel.

On April 1, 2005, an amendment to the Investment Law came into effect (the "Amendment") and significantly changed the provisions of the Investment Law. The Amendment limits the scope of an enterprise which may be approved by the Investment Center by setting criteria for the approval of a facility as a "Beneficiary Enterprise"; such criteria generally require that at least 25% of the Beneficiary Enterprise's income will be derived from export. Additionally, the Amendment enacted major changes in the manner in which tax benefits are awarded under the Investment Law so that companies no longer require Investment Center approval in order to qualify for tax benefits.

In addition, the Amendment provides that terms and benefits included in any certificate of approval issued prior to December 31, 2004 will remain subject to the provisions of the Investment Law as they were on the date of such prior approval. Therefore, our existing Approved Enterprise will generally not be subject to the provisions of the Amendment. As a result of the Amendment, tax-exempt income generated under the provisions of the new law, as part of a new Beneficiary Enterprise, will subject us to taxes upon distribution or liquidation.

Camtek has been granted the status of Approved Enterprise, under the Investment Law, for investment programs for the periods which ended in 2007 and 2010, and the status of Beneficiary Enterprise according to the Amendment, for a period which ended in 2014. In addition, Camtek has elected 2010 as the year of election for a period ending 2021 (collectively, "Programs").

On December 29, 2010, the Investment Law was amended to significantly revise the tax incentive regime in Israel commencing on January 1, 2011. For more information, see Item 10.E below – "Taxation – Israeli Taxation - Tax Benefits Under the Law for the Encouragement of Capital Investments, 1959."

Out of Camtek's retained earnings as of December 31, 2016 approximately $18.6 million are tax-exempt earnings attributable to its Approved Enterprise and approximately $2.8 million are tax-exempt earnings attributable to its Beneficiary Enterprise. The tax-exempt income attributable to the Approved and Beneficiary Enterprises cannot be distributed to shareholders without subjecting the Company to taxes. If these retained tax-exempt profits are distributed, the Company would be taxed at the reduced corporate tax rate applicable to such profits in the year in which they were generated. According to the Amendment, tax-exempt income generated under the Beneficiary Enterprise will be taxed upon dividend distribution or complete liquidation, whereas tax exempt income generated under the Approved Enterprise will be taxed only upon dividend distribution (but not upon complete liquidation, as the tax liability will be incurred by the shareholders).

As of December 31, 2016, if the income attributed to the Approved Enterprise was distributed as dividend, we would incur a tax liability of approximately $4.65 million. If income attributed to the Beneficiary Enterprise was distributed as dividend, or upon liquidation, we would incur a tax liability in the amount of approximately $0.7 million. These amounts would be recorded as an income tax expense in the period in which we would declare the dividend.

We intend to indefinitely reinvest the amount of our tax-exempt income and not distribute any amounts of our undistributed tax-exempt income as dividend. Accordingly, no deferred tax liabilities have been provided on income attributable to our Approved and Beneficiary Enterprise Programs as the undistributed tax exempt income is essentially permanent in duration.

The entitlement to the above benefits is conditional upon our fulfilling the conditions stipulated by the law and the regulations published there under as well as the criteria set forth in the approval for the specific investments in Approved Enterprises. In the event of failure to meet such requirements in the future, income attributable to our Programs could be subject to the statutory Israeli corporate tax rates and we could be required to refund a portion of the tax benefits already received, with respect to such Programs. Our management believes that we have met the aforementioned conditions.

Foreign Currency Fluctuation

See in Item 3.D above – "Risk Factors – Risk Factors Related to Our Business and Our Markets – Fluctuations in currency exchange rates may result in the prices of our products becoming less competitive or in additional expenses being recorded, and thus may have negative impact on our profitability".

C. Research and Development, Patents and Licenses.

We believe that intensive R&D is essential to our business. We devote substantial R&D resources to developing new products and to improving our existing products to meet our customers' evolving needs. We have dedicated teams with expertise in image processing software and algorithms, electronic hardware, electro optics, physics, mechanics and systems design.

Our R&D efforts are primarily focused on:

- improving our defect detection capabilities while reducing the number of false alarms, simplifying operation and reducing the level of user expertise required to realize the benefits of our systems;

- increasing the throughput of our AOI systems;

- providing unique technological solutions to our customers;

- adding capabilities to expand our market segments; and

- developing the New FIT Product.

In addition, we are focusing our efforts on leveraging our core technologies, expertise and experience into continually enhancing the value to the user and the return on investment from our products. We believe that our internal multi disciplinary expertise will enable us to maintain and enhance our technological edge.

As of December 31, 2016, we had 95 employees engaged in R&D, almost all of whom are based in our headquarters in Israel. We also use subcontractors for the development of some of the hardware components of our systems. Our R&D expenses were $15.9 million, $14.9 million and $14.4 million for the years ended December 31, 2016, 2015 and 2014, respectively, representing 15%, 15%, and 16% of the total revenues for the years then ended.

We will continue to devote our R&D resources to maintaining and extending our technology leadership position.

Our R&D costs are expensed as incurred.

In general, we rely on a combination of our copyrights, trade secrets, patents, trademarks and non-disclosure agreements to protect our proprietary know-how and intellectual property. We also enter into confidentiality agreements with key employees and with all of the subcontractors who develop and manufacture components for use in our products. We also employ specialists whose main role is to maintain and protect our intellectual property from both professional and legal perspectives. We cannot be certain that actions we take to protect our proprietary rights will be adequate nor can we be certain that we will be able to deter reverse engineering or that there will not be independent third-party development of our technology.

We have 90 patents pending worldwide and 7 U.S. provisional applications. In addition, we have 113 registered patents in the following countries: the United States (43), Israel (15), Europe (1), Korea (3), Japan (4), Singapore (1), China (22) and Taiwan (24). These patents relate to our proprietary technology and know-how developed for AOI and Functional Digital Printing tools in the Semiconductor, PCB High Density Interconnect PCBs ("HDI") and IC Substrates industries. We also have 10 registered trademarks in Israel.

D. Trend Information

The semiconductor fabrication industry and the PCB industry have historically been cyclical and highly influenced by weakness or uncertainties in global economic conditions. 2015 and 2016 were characterized by general improvement in the semiconductor industry and increased capital expenditure spending by the major manufacturers and OSATs. One of the key drivers for this trend was emerging new technologies such as advanced packaging. Although global economic uncertainties are still evident we believe that this positive momentum will continue into 2017. 2015 and 2016 were characterized by general market stability in the PCB industry. For specific trend information regarding each of the markets in which we operate see Item 4.B above - "Our Markets".

E. Off-Balance Sheet Arrangements

We do not have any arrangements or relationships with entities that are not consolidated into our financial statements and are reasonably likely to materially affect our liquidity or the availability of our capital resources. However, we have entered into various non-cancelable operating lease agreements, principally for office space and vehicles, as disclosed in our consolidated financial statements.

As of December 31, 2016, minimum future rental payments under such non-cancelable operating lease agreements were approximately $3.7 million.

F. Contractual Obligations and Other Commercial Commitments.

As of December 31, 2016, we had contractual obligations and commercial commitments of:

	Payment Due by Period				
Contractual Obligations	Total	Less than 1 Year	1 3 years	3 5 years	More than 5 years
	(in thousands)				
Purchase obligations (1)	10,191	10,191	-	-	-
Severance obligation	870	-	-	-	870
Other long term obligations (2)	3,711	1,422	1,833	456	-
Total	14,722	11,613	1,833	456	870

(1) Purchase obligations mainly represent outstanding purchase commitments for inventory components ordered in the normal course of business.

(2) In 2015, we entered into a new framework agreement for non-cancelable operating leases for vehicles for a period of 36 months. As of December 31, 2016, the minimum future rental payments (including future vehicle rental by our subsidiaries) were approximately $1.2 million.

Our subsidiaries have entered into various operating lease agreements, principally for office space. As of December 31, 2016, minimum future rental payments under these leases amounted to $2.1 million.

Other long-term liabilities include approximately $0.3 million in staff rent.

Item 6. Directors, Senior Management and Key Employees

A. Directors and Senior Management

The following table lists the name, age and position of each of our current directors and senior management:

Name	Age	Title
Rafi Amit	68	Chairman of the Board of Directors and Chief Executive Officer*
Yotam Stern	64	Director
Gabi Heller	52	Director
Rafi Koriat	70	Director
Eran Bendoly	52	Director
Moty Ben-Arie		