

INTEVAC INC

FORM 10-K (Annual Report)

Filed 02/15/17 for the Period Ending 12/31/16

Address	3560 BASSETT STREET SANTA CLARA, CA, 95054
Telephone	4089869888
CIK	0001001902
Symbol	IVAC
SIC Code	3559 - Special Industry Machinery, Not Elsewhere Classified
Industry	Industrial Machinery & Equipment
Sector	Industrials
Fiscal Year	12/31

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549
Form 10-K

(Mark One)

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

For the transition period from _____ to _____

Commission file number 0-26946

INTEVAC, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3125814
(I.R.S. Employer Identification No.)

3560 Bassett Street
Santa Clara, California 95054
(Address of principal executive office, including Zip Code)

Registrant's telephone number, including area code: (408) 986-9888

Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common Stock (\$0.001 par value)

Name of each exchange on which registered
The Nasdaq Stock Market LLC (NASDAQ Global Select)

Securities registered pursuant to Section 12(g) of the Act:

None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes 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. 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). Yes No

Indicate by a check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of July 2, 2016, the aggregate market value of voting and non-voting stock held by non-affiliates of the Registrant was approximately \$101,863,142 (based on the closing price for shares of the Registrant's Common Stock as reported by the Nasdaq Stock Market for the last trading day prior to that date). Shares of Common Stock held by each executive officer and director have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On February 15, 2017, 21,390,336 shares of the Registrant's Common Stock, \$0.001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE.

Portions of the Registrant's Proxy Statement for the 2017 Annual Meeting of Stockholders are incorporated by reference into Part III. Such proxy statement will be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain information in this Annual Report on Form 10-K (report or Form 10-K) of Intevac, Inc. and its subsidiaries (“Intevac” or the “Company”), including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7, is forward-looking in nature. All statements in this report, including those made by the management of Intevac, other than statements of historical fact, are forward-looking statements. Examples of forward-looking statements include statements regarding Intevac’s future financial results, operating results, cash flows and cash deployment strategies, business strategies, costs, products, working capital, competitive positions, management’s plans and objectives for future operations, research and development, acquisitions and joint ventures, growth opportunities, customer contracts, investments, liquidity, declaration of dividends, and legal proceedings, as well as market conditions and industry trends. These forward-looking statements are based on management’s estimates, projections and assumptions as of the date hereof and include the assumptions that underlie such statements. Forward-looking statements may contain words such as “may,” “will,” “should,” “could,” “would,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential” and “continue,” the negative of these terms, or other comparable terminology. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in Item 1A, “Risk Factors,” below and elsewhere in this report. Other risks and uncertainties may be disclosed in Intevac’s prior Securities and Exchange Commission (“SEC”) filings. These and many other factors could affect Intevac’s future financial condition and operating results and could cause actual results to differ materially from expectations based on forward-looking statements made in this report or elsewhere by Intevac or on its behalf. Intevac undertakes no obligation to revise or update any forward-looking statements.

The following information should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included in this report.

PART I

Item 1. *Business*

Overview

Intevac’s business consists of two reportable segments:

Thin-film Equipment: Intevac is a leader in the design and development of high-productivity, thin-film processing systems. Our production-proven platforms are designed for high-volume manufacturing of substrates with precise thin-film properties, such as the hard drive media, display cover panel (“DCP”), and solar photovoltaic (“PV”) markets we serve currently.

Photonics: Intevac is a leading developer of advanced high-sensitivity digital sensors, cameras and systems that primarily serve the defense industry. We are the provider of integrated digital night-vision imaging systems for the U.S. military.

Intevac was incorporated in California in October 1990 and was reincorporated in Delaware in 2007.

Thin-film Equipment Segment

Hard Disk Drive (“HDD”) Equipment Market

Intevac designs, manufactures, markets and services complex capital equipment used to deposit thin films and lubricants onto substrates to produce magnetic disks that are used in HDDs. Disk and disk drive manufacturers produce magnetic disks in a sophisticated manufacturing process involving many steps, including plating, annealing, polishing, texturing, sputtering, etching, stripping and lubrication. Intevac believes its systems represent approximately 60% of the installed capacity for disk sputtering worldwide. Intevac’s systems are used

[Table of Contents](#)

by manufacturers of magnetic media such as Seagate Technology, Western Digital, including its wholly-owned subsidiary HGST, Fuji Electric, and Showa Denko.

HDDs are a primary storage medium for digital data including nearline “cloud” applications and are used in products and applications such as personal computers (“PCs”), enterprise data storage, video players and video game consoles. Intevac believes that HDD media shipments will grow over time, driven by continued high growth rates in digitally-stored data, by the slowing of areal density improvements, by the increase in demand for nearline drives for cloud storage, an increasing tie ratio (the average number of disks per hard drive) and by new and emerging applications. The projected growth rates for digitally-stored data on HDDs exceed the rate of areal density improvements, at the same time as the tie ratio is increasing, which results in demand for magnetic disks outpacing HDD units.

In recent years HDD media units have been negatively impacted by declining PC units, primarily caused as a result of the proliferation of tablets and the transition to centralized storage. Although the HDD industry continues to expect growth in the nearline data storage market segment, the transition to centralized storage combined with the negative growth in PC shipments has resulted in lower HDD shipments in recent years. However, Intevac continues to believe that long-term demand for hard disks required for high capacity HDDs will increase, driven by growth in demand for digital storage, a declining growth rate in areal density improvements, and increased information technology spending to support the transition to cloud storage. The number of disk manufacturing systems needed to support this growth as well as future technology transitions and improvements is expected to vary from year to year depending on the factors noted above.

Intevac expects that HDD manufacturers will extend their utilization of planar perpendicular media with the introduction of Heat Assisted Magnetic Recording (“HAMR”) expected within the next two to three years. The first HAMR-based HDDs are expected to ship to the marketplace by mid to late 2017. Intevac believes that leading manufacturers of magnetic media are using Intevac systems for HAMR development, creating a significant market opportunity as HAMR is more widely adopted. Significant market penetration of HAMR-based HDDs is expected to occur in mid to late 2018. Intevac believes that the transition to HAMR will require disk manufacturers to upgrade their installed base of equipment, which would result in increased demand for equipment technology upgrades to be performed by Intevac.

Display Cover Panel (“DCP”) Market

Intevac develops equipment to deposit optically transparent thin films onto DCPs typically found on consumer and automotive electronic products.

DCPs are found in products including smartphones, tablet PCs, wearable devices, gaming systems, digital cameras, automotive infotainment systems and digital signage. In 2016, approximately 1.5 billion mobile phones, 183 million tablet PCs and 102 million wearable devices were shipped to consumers worldwide. For smartphones alone, it is forecasted that nearly 1.9 billion units will ship by 2020, representing a CAGR of greater than 6% for the 2016 – 2020 time period.

The DCP is typically made of tempered glass, such as soda-lime or aluminosilicate, or other materials such as sapphire. The primary function of the DCP is to provide a clear protective interface to the display it protects. In many cases, the DCP is treated with various coatings to enhance its protective performance as well as for clarity, readability and touch sensitivity.

The types of coatings typically found on DCPs of electronic devices include: Scratch Protection (“SP”) coatings, Anti-Reflection (“AR”) coatings, and Anti-Finger (“AF”) coatings.

SP coatings generally consist of hard thin films deposited onto the surface of the DCP. Their primary function is to provide enhanced protection against the incidence of scratch, but they can also provide greater breakage resistance. SP coatings also improve the readability of displays.

[Table of Contents](#)

AR coatings enable greater light transmission through the DCP by reducing the light reflected by the surface back to the user's eye. This allows the user to more easily read the display and reduces the required power needed to display the image which results in extending the battery life. A significant drawback to using AR coatings is their susceptibility to scratch. AR coatings are typically soft and must be applied to the outer surface of the DCP. These coatings generally scratch easily, and as such, smartphone manufacturers have been reluctant to implement AR coatings on their products.

AF coatings provide water and oil protection for the surface of the DCP. This coating, which prevents fingerprints, provides greater aesthetics as well as improving readability. AF coatings allow for greater visual acuity when fingerprints are not visible. The drawback to AF coatings is their relatively low resistance to wear. The coating is soft and usually wears off within a few months of product purchase.

Intevac has developed and is currently marketing a SP coating known as Optical Diamond-like-Carbon ("oDLC™") utilizing its production-proven carbon film technology that is also used on HDD media. This coating provides a hard protective layer which significantly improves the DCP's resistance to scratches and breakage. The scratch protection benefits with the oDLC coating has demonstrated a greater than 9 times improvement over current standard cover glass. Furthermore using a Ring-on-Ring ("RoR") test, cover glass with our oDLC coating provides a greater than 20 percent increase in breakage resistance strength over cover glass without the oDLC coating. Intevac expects that the adoption of AR coatings on mobile devices will create an increased need for SP coatings and provide a significant demand opportunity for oDLC.

Solar Market

Intevac designs, manufactures and markets capital equipment for the PV solar manufacturing industry.

A solar cell (also called a PV cell) is a solid state device that converts the energy of sunlight directly into electricity. Assemblies of cells are used to make solar modules, also known as solar panels. Solar panels have broad-based end market applications for utility-scale solar farms; integrated building PV arrays for commercial, retail, and offices; residential rooftop; and for portable devices.

The cost of electricity generated from solar energy, in many cases, remains higher than that of electricity generated from traditional energy sources. However, deployment of photovoltaics is gaining momentum on a worldwide scale, particularly in Asia, North America and other regions, where solar PV is now increasingly competitive with conventional energy sources. Grid parity, whereby solar PV generates power at a levelized cost of electricity ("LCOE") less than or equal to the price of power purchased from the electrical grid, has already been reached in about thirty countries. In countries or areas where the cost of solar energy generation remains higher than traditional electricity generation sources, some governments have implemented various tax credits and other financial incentives to promote the growth in solar and other alternative energy sources. As a result of solar energy costs having favorably declined due to the increased scale and improved manufacturing efficiencies spurred by these incentive policies, many governments have reduced or are planning to reduce their incentives for solar, a trend which is likely to continue. However, the United States Investment Tax Credit ("ITC") for solar which was due to expire by the end of 2016, has been extended through 2020 to continue the proliferation of solar generated energy in the United States. As of the beginning of 2016 twenty U.S. states had reached grid parity, and an additional twenty-two are poised to reach grid parity within this decade. More than 60 gigawatts of solar capacity was added globally in 2016. In mid-2016 the solar industry entered a downturn as utility-scale solar projects came under pricing pressure and retail deployments were below expectations as U.S. consumers delayed spending as a result of the extension of the ITC. Intevac expects that 2017 will continue to be challenging for the solar industry due to further declines in solar panel pricing, weaker panel demand and lower project activity.

The PV industry continues to focus on the development of high-efficiency cell technologies aimed at simultaneously boosting PV efficiency and reducing solar energy production costs. New vacuum process

[Table of Contents](#)

technologies and integrated processing steps are expected to become increasingly important as companies search for lower-cost manufacturing solutions for PV cells.

Intevac offers products for wafer-based crystalline silicon (“c-Si”) solar cell manufacturing processes, the prevailing manufacturing process in the PV industry. Intevac’s products for the solar industry are specifically focused on cell designs with the highest energy conversion efficiency, which are within the n-type mono crystalline portion of the market.

Intevac offers thin-film vacuum process manufacturing solutions for c-Si cell fabrication applications. Intevac offers high-productivity process equipment solutions that enable low-cost solar cell manufacturing with high cell efficiency, consistent with the PV industry’s focus and requirements. Intevac has developed two vacuum process application technologies for solar cell manufacturing: one utilizes Physical Vapor Deposition (“PVD”) technology for the deposition of thin films onto c-Si wafers, and the other utilizes ion implantation, which selectively changes the electrical characteristics of the c-Si solar cell.

PVD is a process used in multiple ways in the manufacturing of solar cells such as for fabricating electrical contacts and conductor layers, depositing reflective layers of various types, and for growing transparent conductive oxide layers, all of which are critical to the efficiency of solar cells.

Ion implantation is a solar cell processing technology whereby an impurity is added to a PV structure to improve its conductivity. In ion implantation, a beam of ions of a desired dopant element such as phosphorus or boron is electrostatically accelerated and directed toward the target material, introducing the impurity. In a subsequent thermal annealing step, the dopant is electrically activated. The ion implant processes enable precision engineering of the dose and of the depth of dopant elements to form emitter structures in working solar cells. Ion implantation is a technique being introduced to solar cell lines as a means to lower the cost per watt to manufacture the cell. Ion implantation can replace existing diffusion processes in existing solar processing lines for present-day PV cell structures, and is also extendable to new advanced cell structures. In both cases, ion implant-formed emitters are created with fewer processing steps, and therefore at lower cost, than the diffusion processes implant displaces. Intevac’s ion implantation products are based upon technology developed by Solar Implant Technologies, Inc. (“SIT”) which was acquired by Intevac in November 2010.

Thin-Film Equipment Products

Intevac’s Thin-film Equipment product portfolio addressing each of these markets is based around common core technologies and competencies. Intevac believes its Thin-film Equipment product portfolio can be extended to support adjacent markets. Based on its history and market and technology leadership in the hard disk drive industry, Intevac offers superior high-productivity vacuum handling of small substrates at the lowest cost of ownership. Lowest cost of ownership includes various advantages such as high target utilization, high throughput, small footprint, double-sided coating, and reduced materials costs.

[Table of Contents](#)

Product Table

The following table presents a representative list of the Thin-film Equipment products that we offered during fiscal 2016, fiscal 2015 and fiscal 2014.

Thin Film Equipment Products	Applications and Features
Hard Disk Drive Equipment Market	
200 Lean ® Disk Sputtering System	<ul style="list-style-type: none">• Uses PVD and chemical vapor deposition (“CVD”) technologies.• Deposits magnetic films, non-magnetic films and protective carbon-based overcoats.• Provides high-throughput for small-substrate processing.• Over 150 units installed.
200 Lean Etch and Deposition System	<ul style="list-style-type: none">• Uses PVD and etch technologies.• For use in HAMR and patterned media development.
AccuLuber™ Disk Lubrication System	<ul style="list-style-type: none">• Deposits lubricants onto the hard disk’s surface to improve durability and reduce surface friction.• Lubricates disks while under vacuum.• Eliminates the environmentally hazardous use of solvents.
Upgrades, spares, consumables and services (non-systems business)	<ul style="list-style-type: none">• Upgrades to the installed base to support the continued growth in areal density or reduce the manufacturing cost per disk.
DCP Market	
INTEVAC VERTEX™ System	<ul style="list-style-type: none">• Utilizes vertical sputtering for multiple film types.• Provides high-throughput for small-substrate processing.• Uses leading target utilization technology.• Modular design enables expandability.• Enables low-temperature processing.
Solar PV Market	
INTEVAC MATRIX™ PVD System	<ul style="list-style-type: none">• Deposits electrical contacts and conductor layers, reflective layers, and transparent conductive oxide layers, all of which are critical to the efficiency of solar cells.• Includes patented Linear Scanning Magnetic Array (“LSMA”) magnetron source, with industry-leading target utilization rate of over 65 percent.• Provides high-throughput for small-substrate processing.
INTEVAC MATRIX Implant System	<ul style="list-style-type: none">• Utilizes the chambers and transport mechanism of the MATRIX platform while using the implant sources from the ENERG <i>i</i> system.
ENERG <i>i</i> ™ Implant System	<ul style="list-style-type: none">• Supports both phosphorus and boron dopant technologies.• Extendable to new advanced solar cell structures.
Adjacent Markets	
INTEVAC MATRIX System	<ul style="list-style-type: none">• Incorporates multiple thin-film deposition techniques such as PVD and CVD.• Consists of high-speed linear transport.• Flexible design enables handling of various different small substrate sizes and shapes.• Performs double-sided coating within vacuum.

Photonics Segment

Photonics Market

Intevac Photonics develops, manufactures and sells compact, cost-effective, high-sensitivity digital-optical products for the capture and display of extreme low-light images. These products incorporate high resolution digital night-image sensors operating in the visible and near infrared (“NIR”) light spectrums and are based on Intevac’s proprietary EBAPS[®] (Electron Bombarded Active Pixel Sensor) technology.

Photonics products primarily address the high performance military night-vision market. Our products provide digital imagery in extremely low-light level conditions. Intevac provides these products for military aircraft including the U.S. Army AH-64 Apache Attack Helicopter and the F-35 Joint Strike Fighter. Additionally, the Company is developing applications to address ground vehicles, and soldier head-mounted and weapon-mounted applications.

Military Products

Intevac’s EBAPS sensors are incorporated into custom-designed cameras, modules and goggle products for high performance military applications. Intevac’s EBAPS sensors can be integrated at various levels with optics, electronics, software, and displays based upon customer specifications and requirements. Customization typically occurs in the areas of electronics, near-eye micro-displays, and mechanical packaging. Intevac’s products by application are:

Helicopter Pilotage

Intevac provides a night-vision camera with a 2.0 mega-pixel resolution EBAPS module which is turret-mounted on the Apache helicopter. The low-light level digital video is then viewable by the helicopter pilot on a Head-Mounted Display (“HMD”) enabling the pilot to have enhanced night vision and allowing the aircrew to view multiple aircraft-mounted sensor information. In addition the U.S. Navy has funded a High Resolution Digital Night Vision Goggle (“HRDG”) development program incorporating a 4.0 mega-pixel resolution EBAPS module for aviation applications. The initial HRDG prototypes were delivered to the U.S. Navy in 2016.

Fixed Wing Aircraft Pilotage

Intevac provides night-vision cameras with a 2.0 mega-pixel resolution EBAPS module which is integrated with the F-35 fighter pilot’s helmet and enables the pilot to have enhanced night vision incorporating navigational and tactical information.

Long-Range Target Identification

Intevac provides the Laser Illuminated Viewing and Ranging (“LIVAR[®]”) shortwave-infrared camera for long range military night time surveillance systems that can identify targets at distances of up to twenty kilometers. Photonics’ LIVAR camera is incorporated into long range target identification systems manufactured by a major defense contractor.

Soldier Mobility

Both the U.S. Army and Special Operations Command sponsored programs to develop binocular night-vision goggles incorporating digitally fused low-light level and thermal image sensors. Both head-mounted digital imaging systems will allow low-light level and thermal imagery to be viewed individually or to be overlaid. Our solution targets the fused night-vision monocular for U.S. Army ground forces, which is the program of record to replace analog night vision. We delivered our first demonstrator monocular to the Army in 2016, for evaluation of alternatives for the fused mobility vision program. We will be demonstrating not only superior night-vision capability, but the advantage of digital, such as zoom, information overlay, and wireless digital image transmission and reception.

[Table of Contents](#)

Virtual Reality (“VR”), Simulation, and Wireless Weapon Sights

Intevac provides HMDs for applications in VR, simulation, training, and wireless weapon sights. The HMD is a near-eye, high definition, wide field of view micro-display system for portable viewing of video in military and commercial markets. Depending on the application, Intevac provides configuration choices that include monocular or binocular, mono or stereo video, and wired or wireless interfaces. Integral Inertial Measurement Units (“IMU”) are also offered.

Rifle Sight

Intevac provided EBAPS modules that were integrated by our customers into a weapon sight attached to weaponry, including rifles for night time aiming and targeting.

Commercial Products

Low-Light Cameras

Photonics’ MicroVista® product line of commercial compact and lightweight low-light Complementary Metal–Oxide–Semiconductor (“CMOS”) cameras provides high sensitivity in the ultraviolet, visible or NIR regions of the spectrum for use in industrial inspection, bio-medical and scientific applications. These cameras are primarily sold through distribution channels and to original equipment manufacturers.

Backlog

Intevac’s backlog of orders at December 31, 2016 was \$68.5 million, as compared to January 2, 2016 of \$51.2 million. Backlog at December 31, 2016 consisted of \$46.3 million of Thin-film Equipment backlog and \$22.2 million of Photonics backlog. Backlog at January 2, 2016 consisted of \$19.3 million of Thin-film Equipment backlog and \$31.8 million of Photonics backlog. Backlog at December 31, 2016 includes four 200 Lean systems, three PV implant systems and four PVD DCP coating systems. Backlog at January 2, 2016 includes one PV deposition system, two PV implant systems and one PVD DCP coating system. Backlog includes only customer orders with scheduled delivery dates.

Customer Concentration

Historically, a significant portion of Intevac’s revenue in any particular period has been attributable to sales to a limited number of customers.

The following customers accounted for at least 10 percent of Intevac’s consolidated net revenues in fiscal 2016, 2015, and 2014.

	2016	2015	2014
Seagate Technology	34%	22%	15%
U.S. Government	22%	26%	32%
Elbit Systems of America	10%	*	*
HGST	*	15%	17%

* Less than 10%

Intevac expects that sales of Intevac’s products to relatively few customers will continue to account for a high percentage of Intevac’s revenues in the foreseeable future.

Foreign sales accounted for 48% of revenue in fiscal 2016, 35% of revenue in fiscal 2015, and 21% of revenue in fiscal 2014. The majority of Intevac’s foreign sales are to companies in Asia or to U.S. companies for

[Table of Contents](#)

use in their Asian manufacturing or development operations. Intevac anticipates that foreign sales will continue to be a significant portion of Intevac's Thin-film Equipment revenues. Intevac's disk sputtering equipment customers include magnetic disk manufacturers, such as Fuji Electric and Showa Denko, and vertically integrated HDD manufacturers, such as Seagate, Western Digital and HGST. Intevac's PV solar equipment customers include solar panel manufacturers, such as First Solar and SunPower. Intevac's DCP equipment customers include DCP manufacturers, such as Truly Opto-electronics. Intevac's customers' manufacturing facilities are primarily located in California, China, Taiwan, Japan, Malaysia and Singapore.

Competition

The principal competitive factors affecting the markets for Intevac Thin-film Equipment products include price, product performance and functionality, ease of integration, customer support and service, reputation and reliability. Intevac has one major competitor, Canon Anelva, in the hard disk drive equipment market and has historically experienced intense worldwide competition for magnetic disk sputtering equipment. Intevac primarily faces competition from large established global competitors in the PV equipment market including Applied Materials, Centrotherm Photovoltaics, Amtech, Jusung and Von Ardenne. Intevac faces competition in the DCP market from glass manufacturers that may develop scratch resistant glass, from touchscreen manufacturers that may adopt harder substrate materials, or from other equipment companies, chemical companies or the display cover plate manufacturers themselves that may offer competing protective coatings including oDLC. These competitors generally have substantially greater financial, technical, marketing, manufacturing and other resources as compared to Intevac. Furthermore, any of Intevac's competitors may develop enhancements to, or future generations of, competitive products that offer superior price or performance features. In addition, new competitors, with enhanced products may enter the markets that Intevac currently serves.

The principal competitive factors affecting Photonics products include price, extreme low-light level detection performance, power consumption, resolution, size, ease of integration, reliability, reputation and customer support and service. Intevac faces substantial competition for Photonics products, and many competitors have substantially greater resources and brand recognition. In the military market, Harris Corporation and L-3 Communications are large and well-established defense contractors and are the primary U.S. manufacturers of analog image intensifier tubes used in Generation-III night-vision devices and their derivative products. Intevac expects that other companies will develop digital night-vision products and aggressively promote their sales. Within the near-eye display market, Intevac also currently faces competition from Rockwell-Collins, Kopin and Six 15 Technologies in the defense space and anticipates that in the future it will experience competition from lower performance, niche commercial HMD providers expanding into defense applications, all of which can offer cost-competitive products.

Marketing and Sales

Thin-film Equipment sales are made primarily through Intevac's direct sales force. Intevac also sells its products through distributors in Japan and China. The selling process for Intevac's Thin-film Equipment products is multi-level and lengthy, involving individuals from marketing, engineering, operations, customer service and senior management.

Installing and integrating new equipment requires a substantial investment by a customer. Sales of Intevac's systems depend, in significant part, upon the decision of a prospective customer to replace obsolete equipment or to increase manufacturing capacity by upgrading or expanding existing manufacturing facilities or by constructing new manufacturing facilities, all of which typically involve a significant capital commitment. Intevac's systems have a lengthy sales cycle, during which Intevac may expend substantial funds and management time and effort with no assurance that a sale will result.

The production of large complex systems requires Intevac to make significant investments in inventory both to fulfill customer orders and to maintain adequate supplies of spare parts to service previously shipped systems.

[Table of Contents](#)

Intevac maintains inventories of spare parts in the United States, Singapore, Malaysia and China to support its Thin-film Equipment customers. Intevac often requires its Thin-film Equipment customers to pay for systems in three installments, with a portion of the system price billed upon receipt of an order, a portion of the price billed upon shipment, and the balance of the price and any sales tax due upon completion of installation and acceptance of the system at the customer's factory.

Intevac provides process and applications support, customer training, installation, start-up assistance and post-installation service support to Intevac's Thin-film Equipment customers. Intevac has field offices in Singapore, China, and Malaysia to support Intevac's customers in Asia.

Warranties for Intevac's Thin-film Equipment products typically range between 12 and 24 months from customer acceptance. During the warranty period any necessary non-consumable parts are supplied and installed without charge.

Sales of Photonics products for military applications are primarily made to the end user through Intevac's direct sales force. Intevac sells to the U.S. government and to leading defense contractors such as Lockheed Martin Corporation, Northrop Grumman Corporation, Elbit Systems of America, Raytheon, DRS Technologies, BAE and Safran Electronics and Defense.

Intevac is subject to long sales cycles in the Photonics segment because many of Intevac's products, such as Intevac's night-vision systems, typically must be designed into Intevac's customers' products, which are often complex and state-of-the-art. These development cycles are generally multi-year, and Intevac's sales are dependent on Intevac's customer successfully integrating Intevac's product into its product, completing development of its product and then obtaining production orders for its product. Sales of these products are also often dependent on ongoing funding of defense programs by the U.S. government and its allies. Additionally, sales to international customers are contingent on issuance of export licenses by the U.S. government.

Photonics generally invoices its research and development customers either as costs are incurred, or as program milestones are achieved, depending upon the particular contract terms. As a government contractor, Intevac invoices customers using estimated annual rates approved by the Defense Contracts Audit Agency ("DCAA").

Research and Development and Intellectual Property

Intevac's long-term growth strategy requires continued development of new products. Intevac works closely with Intevac's customers to design products that meet their planned technical and production requirements. Product development and engineering organizations are located primarily in the United States and Singapore.

Intevac invested \$18.2 million (22.7% of net revenue) in fiscal 2016, \$15.7 million (20.8% of net revenue) in fiscal 2015, and \$15.8 million (24.2% of net revenue) in fiscal 2014 for product development and engineering programs to create new products and to improve existing technologies and products. Intevac has spent an average of 27.4% of net revenues on product development and engineering over the last five years.

Intevac's competitive position significantly depends on Intevac's research, development, engineering, manufacturing and marketing capabilities, and not just on Intevac's patent position. However, protection of Intevac's technological assets by obtaining and enforcing intellectual property rights, including patents, is important. Therefore, Intevac's practice is to file patent applications in the United States and other countries for inventions that Intevac considers important. Although Intevac does not consider Intevac's business materially dependent upon any one patent, the rights of Intevac and the products made and sold under Intevac's patents along with other intellectual property, including trademarks, know-how, trade secrets and copyrights, taken as a whole, are a significant element of Intevac's business.

[Table of Contents](#)

Intevac enters into patent and technology licensing agreements with other companies when management determines that it is in Intevac's best interest to do so. Intevac pays royalties under existing patent license agreements for use of certain patented technologies in several of Intevac's products. Intevac also receives, from time to time, royalties from licenses granted to third parties. Royalties received from or paid to third parties have not been material to Intevac's consolidated results of operations.

In the normal course of business, Intevac periodically receives and makes inquiries regarding possible patent infringements. In dealing with such inquiries, it may be necessary or useful for us to obtain or grant licenses or other rights. However, there can be no assurance that such licenses or rights will be available to us on commercially reasonable terms, or at all. If Intevac is not able to resolve or settle claims, obtain necessary licenses and/or successfully prosecute or defend Intevac's position, Intevac's business, financial condition and results of operations could be materially and adversely affected.

Manufacturing

Intevac manufactures its Thin-film Equipment products at its facilities in California and Singapore. Intevac's Thin-film Equipment manufacturing operations include electromechanical assembly, vacuum processing, fabrication of sputter sources, and system assembly, alignment and testing.

Photonics products are manufactured at Intevac's facilities in California. Photonics manufactures sensors, cameras, integrated camera systems, and near-eye display systems using advanced manufacturing techniques and equipment. Intevac's operations include vacuum processing, and electromechanical and optical system assembly.

Employees

At December 31, 2016, Intevac had 286 employees, including 14 contract employees.

Compliance with Environmental Regulations

Intevac is subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. Intevac treats the cost of complying with government regulations and operating a safe workplace as a normal cost of business and allocates the cost of these activities to all functions, except where the cost can be isolated and charged to a specific function. The environmental standards and regulations promulgated by government agencies in California and Singapore are rigorous and set a high standard of compliance. Intevac believes its costs of compliance with these regulations and standards are comparable to other companies operating similar facilities in these jurisdictions.

[Table of Contents](#)

Executive Officers of the Registrant

Certain information about our executive officers as of February 15, 2017 is listed below:

<u>Name</u>	<u>Age</u>	<u>Position</u>
<i>Executive Officers:</i>		
Wendell T. Blonigan	55	President and Chief Executive Officer
James Moniz	59	Executive Vice President, Finance and Administration, Chief Financial Officer and Treasurer
Andres Brugal	59	Executive Vice President and General Manager, Photonics
Jay Cho	52	Executive Vice President and General Manager, Thin-Film Equipment
Christopher Smith	57	Vice President, Business Development
<i>Other Key Officers:</i>		
Babak Adibi	62	Vice President and General Manager, Solar Implant
Verle Aebi	62	Chief Technology Officer, Photonics
Terry Bluck	57	Vice President, Chief Technology Officer, Thin-film Equipment
Kimberly Burk	51	Vice President, Global Human Resources
Timothy Justyn	54	Senior Vice President of Global Operations

Mr. Blonigan joined Intevac in July 2013 as President and Chief Executive Officer. Prior to joining Intevac, Mr. Blonigan co-founded Orbotech LT Solar in 2009 and served as the company's Chief Executive Officer until 2013. From 2006 until 2009, he was the Chief Operating Officer at Photon Dynamics, Inc. In 1991, Mr. Blonigan joined Applied Materials' AKT display subsidiary. During his tenure at AKT, he held various positions. In 2003, he was appointed President and served in this role until 2006; from 1999 through 2003 he was Vice President, and prior to that time he was Director of Engineering and New Product Development. Mr. Blonigan holds a BS in electronic engineering technology from DeVry University Missouri Institute of Technology.

Mr. Moniz joined Intevac as Executive Vice President, Finance and Administration, Chief Financial Officer and Treasurer in November 2014. Mr. Moniz previously served as the Chief Financial Officer of Nanometrics, Inc. from 2009 until his retirement in 2011. During 2008, Mr. Moniz was the Chief Financial Officer at Photon Dynamics, Inc. From 2000 until 2008, Mr. Moniz served as the Chief Financial Officer at Nextest Systems Corporation. Prior to Nextest, Mr. Moniz held senior financial management positions at Millennia Vision Corporation, Lockheed Martin Corporation, Loral Corporation and Varian Associates. Mr. Moniz holds an MBA, a BS in accounting and a BS in marketing from San Jose State University.

Mr. Brugal joined Intevac as Executive Vice President and General Manager, Photonics in January 2012. Before joining Intevac, Mr. Brugal was employed at Vision Systems International, a joint venture between Rockwell Collins and Elbit Systems of America, from 2006 to 2012, serving as President and Chief Executive Officer from April 2007 to January 2012. From 2005 to 2006, Mr. Brugal was employed as a consultant for DRS Technologies, a subsidiary of Finmeccanica SPA. Mr. Brugal retired from active service with the U.S. Navy in October 2005 with the rank of Captain. Mr. Brugal holds an MS in strategic studies and security affairs from the U.S. Naval War College and a BS in general engineering from the U.S. Naval Academy.

Mr. Cho joined Intevac in January 2014 and currently serves as Executive Vice President and General Manager, Thin-Film Equipment. Prior to joining Intevac, Mr. Cho was President, Chief Executive Officer and Co-Founder of REEnewal Corporation. From 2006 to 2011, Mr. Cho served as Vice President / General Manager of the Tester and Repair Business Units of Orbotech LTD. From 2005 to 2006, Mr. Cho served as Vice President, Product Development at Metara Inc. From 1992 to 2005, Mr. Cho held various management positions at Novellus Systems, Inc. Prior to Novellus, Mr. Cho worked for Digital Equipment Corporation and Intermec Corporation. Mr. Cho holds a BS in electrical engineering from Washington State University and an MBA from University of Phoenix.

[Table of Contents](#)

Mr. Smith joined Intevac in August 2010 and currently serves as Vice President, Business Development. Prior to joining Intevac, Mr. Smith served as Senior Vice President Sales and Customer Support at Oerlikon Solar, from November 2007 to August 2010. From 2006 to 2007 he served as Senior Vice President of Sales and Service with Cymer. Previously, Mr. Smith was employed by Applied Materials from 1994 to 2006. While at Applied Materials he held a variety of executive-level customer support and operations positions. He also served as product business group general manager for Chemical Mechanical Polishing and was managing director of Global Business Development for the Dielectric and Physical Vapor Deposition Product Business Groups. Mr. Smith earned his BS in Business Administration / Material Management from San Jose State University.

Dr. Adibi joined Intevac in November 2010 as Vice President and General Manager, Solar Implant. Prior to joining Intevac, Dr. Adibi was President, Chief Technology Officer and Co-Founder of Solar Implant Technologies. Prior to founding Solar Implant Technologies, Dr. Adibi worked for Silicon Genesis Corporation from 2006 to 2008 as the General Manager of the Solar Equipment Division. From 2003 to 2006 he served as Vice President in the Laser Annealing Product Division of Ultratech. Previously, Dr. Adibi was employed by Applied Materials from 1985 to 2003. While at Applied Materials he held a variety of executive-level engineering positions. Dr. Adibi holds numerous patents in the area of ion implantation, a PhD in ion implantation and semiconductors and a MS in nuclear power from Surrey University in England and a BS in physics from the Imperial College of London.

Mr. Aebi has served as Chief Technology Officer of the Photonics business since August 2006. Previously, Mr. Aebi served as President of the Photonics Division from July 2000 to July 2006 and as General Manager of the Photonics Division since May 1995. Mr. Aebi was elected as a Vice President of the Company in September 1995. From 1988 through 1994, Mr. Aebi was the Engineering Manager of the night-vision business Intevac acquired from Varian Associates in 1991, where he was responsible for new product development in the areas of advanced photocathodes and image intensifiers. Mr. Aebi holds a BS in physics and an MS in electrical engineering from Stanford University.

Mr. Bluck rejoined Intevac as Vice President, Chief Technology Officer of the Thin-film Equipment in August 2004. Mr. Bluck had previously worked at Intevac from December 1996 to November 2002 in various engineering positions. The business unit Mr. Bluck worked for was sold to Photon Dynamics in November 2002, and he was employed there as Vice President, Rapid Thermal Process Product Engineering until August 2004. Mr. Bluck holds a BS in physics from San Jose State University.

Ms. Burk joined Intevac in May 2000 and currently serves as Vice President of Global Human Resources. Prior to joining Intevac, Ms. Burk served as Human Resources Manager of Moen, Inc. from 1999 to 2000 and as Human Resources Manager of Lawson Mardon from 1994 to 1999. Ms. Burk holds a BS in sociology from Northern Illinois University.

Mr. Justyn has served as Senior Vice President of Global Operations from February 2015. Mr. Justyn served as Vice President, Photonics from October 2008 to February 2015. Mr. Justyn served as Vice President, Thin-film Equipment Manufacturing from April 1997 to October 2008. Mr. Justyn joined Intevac in February 1991 and has served in various roles in our Thin-film Equipment Products Division and our former night-vision business. Mr. Justyn holds a BS in chemical engineering from the University of California, Santa Barbara.

Available Information

Intevac's website is <http://www.intevac.com>. Intevac makes available free of charge, on or through its website, its annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to, the SEC. This website address is intended to be an inactive textual reference only and none of the information contained on Intevac's website is part of this report or is incorporated by reference herein.

Trademarks

Intevac's trademarks, include the following: "200 Lean[®]," "AccuLuber[™]," "EBAPS[®]," "ENERG i[™]," "I-Port[™]," "LIVAR[®]," "INTEVAC MATRIX[™]," "MicroVista[®]," "NightVista[®]," "Night Port[™]," "oDLC[™]" and "INTEVAC VERTEX[™]".

Item 1A. Risk Factors

The following factors could materially affect Intevac's business, financial condition or results of operations and should be carefully considered in evaluating the Company and its business, in addition to other information presented elsewhere in this report.

The industries we serve are cyclical, volatile and unpredictable.

A significant portion of our revenue is derived from the sale of equipment used to manufacture commodity technology products such as disk drives, PV solar cells and cell phones. This subjects us to business cycles, the timing, length and volatility of which can be difficult to predict. When demand for commodity technology products exceeds production capacity, then demand for new capital equipment such as ours tends to be amplified. Conversely, when supply of commodity technology products exceeds demand, then demand for new capital equipment such as ours tends to be depressed. For example, sales of systems for magnetic disk production were depressed from late 2007 through 2009. The number of new systems delivered increased in 2010 as customers increased their production capacity in response to increased demand for data storage, but decreased in 2011 through 2015 as the hard disk drive industry did not add the same level of capacity that it did in 2010. We cannot predict with any certainty when these cycles will begin or end. Our sales of systems for magnetic disk production increased modestly in 2016 as a customer upgraded the technology level of its manufacturing capacity. 2017 sales of systems for magnetic disk production are expected to be at the same levels as 2016.

Our equipment represents only a portion of the capital expenditure that our customers incur when they upgrade or add production capacity. Accordingly, our customers generally commit to making large capital expenditures far in excess of the cost of our systems alone when they decide to purchase our systems. The magnitude of these capital expenditures requires our customers to have access to large amounts of capital. Our customers generally reduce their level of capital investment during downturns in the overall economy or during a downturn in their industries. In addition, in recent years the photovoltaic market has undergone a downturn, which is likely to impact our sales of PV products.

We must effectively manage our resources and production capacity to meet rapidly changing demand. Our business experiences rapid growth and contraction, which stresses our infrastructure, internal systems and managerial resources. During periods of increasing demand for our products, we must have sufficient manufacturing capacity and inventory to meet customer demand; attract, retain and motivate a sufficient number of qualified individuals; and effectively manage our supply chain. During periods of decreasing demand for our products, we must be able to align our cost structure with prevailing market conditions; motivate and retain key employees and effectively manage our supply chain.

Sales of our equipment are primarily dependent on our customers' upgrade and capacity expansion plans and whether our customers select our equipment.

We have no control over our customers' upgrade and capacity expansion plans, and we cannot be sure they will select, or continue to select, our equipment when they upgrade or expand their capacity. The sales cycle for our equipment systems can be a year or longer, involving individuals from many different areas of Intevac and numerous product presentations and demonstrations for our prospective customers. Our sales process also commonly includes production of samples and customization of our products. We do not typically enter into long-term contracts with our customers, and until an order is actually submitted by a customer there is no binding commitment to purchase our systems.

[Table of Contents](#)

Sales of new manufacturing systems are also dependent on obsolescence and replacement of the installed base of our customers' existing equipment with newer, more capable equipment. If upgrades are developed that extend the useful life of the installed base of systems, then we tend to sell more upgrade products and fewer new systems, which can significantly reduce total revenue. For example, some of our 200 Lean customers continue to use legacy systems for the production of perpendicular media, which delayed the replacement of such systems with new 200 Lean systems.

Our 200 Lean customers also experience competition from companies that produce alternative storage technologies like flash memory, which offer smaller size, lower power consumption and more rugged designs. These storage technologies are being used increasingly in enterprise applications and smaller form factors such as tablets, smart-phones, ultra-books, and notebook PCs instead of hard disk drives. Tablet computing devices and smart-phones have never contained, nor are they likely in the future to contain, a disk drive. Products using alternative technologies, such as flash memory, optical storage and other storage technologies are becoming increasingly common and could become a significant source of competition to particular applications of the products of our 200 Lean customers, which could adversely affect our results of operations. If alternative technologies, such as flash memory, replace hard disk drives as a significant method of digital storage, then demand for our hard disk manufacturing products would decrease.

The Photonics' business is also subject to long sales cycles because many of its products, such as our military imaging products, often must be designed into the customers' end products, which are often complex state-of-the-art products. These development cycles are typically multi-year, and our sales are contingent on our customers successfully integrating our product into their product, completing development of their product and then obtaining production orders for their product from the U.S. government or its allies.

We operate in an intensely competitive marketplace, and our competitors have greater resources than we do.

In the market for our disk sputtering systems, we experience competition primarily from Canon Anelva, which has sold a substantial number of systems worldwide. In the Photovoltaic ("PV") equipment market, Intevac faces competition from large established competitors including Applied Materials, Centrotherm Photovoltaics, Amtech, Jusung and Von Ardenne. In the market for our military imaging products we experience competition from companies such as Harris Corporation and L-3 Communications. Some of our competitors have substantially greater financial, technical, marketing, manufacturing and other resources than we do, especially in the DCP and PV equipment markets. Our competitors may develop enhancements to, or future generations of, competitive products that offer superior price or performance features, and new competitors may enter our markets and develop such enhanced products. Moreover, competition for our customers is intense, and our competitors have historically offered substantial pricing concessions and incentives to attract our customers or retain their existing customers.

Our growth depends on development of technically advanced new products and processes.

We have invested heavily, and continue to invest, in the development of new products, such as our 200 Lean and other PVD systems, our coating systems for DCP, our solar systems for PV applications, our digital night-vision products and our near-eye display products. Our success in developing and selling new products depends upon a variety of factors, including our ability to: predict future customer requirements, make technological advances, achieve a low total cost of ownership for our products, introduce new products on schedule, manufacture products cost-effectively including transitioning production to volume manufacturing; commercialize and attain customer acceptance of our products; and achieve acceptable and reliable performance of our new products in the field. Our new product decisions and development commitments must anticipate continuously evolving industry requirements significantly in advance of sales. In addition, we are attempting to expand into new or related markets, including the PV and cell phone cover glass markets. Our expansion into the PV market is dependent upon the success of our customers' development plans. To date we have not recognized material revenue from such products. Failure to correctly assess the size of the markets, to successfully develop

[Table of Contents](#)

cost effective products to address the markets or to establish effective sales and support of the new products would have a material adverse effect on future revenues and profits. In addition, if we invest in products for which the market does not develop as anticipated, we may incur significant charges related to such investments.

Rapid technological change in our served markets requires us to rapidly develop new technically advanced products. Our future success depends in part on our ability to develop and offer new products with improved capabilities and to continue to enhance our existing products. If new products have reliability or quality problems, our performance may be impacted by reduced orders, higher manufacturing costs, delays in acceptance and payment for new products and additional service and warranty expenses.

We are exposed to risks associated with a highly concentrated customer base.

Historically, a significant portion of our revenue in any particular period has been attributable to sales of our disk sputtering systems to a limited number of customers. This concentration of customers, when combined with changes in the customers' specific capacity plans and market share shifts can lead to extreme variability in our revenue and financial results from period to period.

The concentration of our customer base may enable our customers to demand pricing and other terms unfavorable to Intevac, and makes us more vulnerable to changes in demand by a given customer. Orders from a relatively limited number of manufacturers have accounted for, and will likely continue to account for, a substantial portion of our revenues. The loss of one of these large customers, or delays in purchasing by them, could have a material and adverse effect on our revenues.

Our operating results fluctuate significantly from quarter to quarter, which can lead to volatility in the price of our common stock.

Our quarterly revenues and common stock price have fluctuated significantly. We anticipate that our revenues, operating margins and common stock price will continue to fluctuate for a variety of reasons, including: (1) changes in the demand, due to seasonality, cyclicity and other factors in the markets for computer systems, storage subsystems and consumer electronics containing disks as well as cell phones and PV solar cells our customers produce with our systems; (2) delays or problems in the introduction and acceptance of our new products, or delivery of existing products; (3) timing of orders, acceptance of new systems by our customers or cancellation of those orders; (4) new products, services or technological innovations by our competitors or us; (5) changes in our manufacturing costs and operating expense; (6) changes in general economic, political, stock market and industry conditions; and (7) any failure of our operating results to meet the expectations of investment research analysts or investors.

Any of these, or other factors, could lead to volatility and/or a rapid change in the trading price of our common shares. In the past, securities class action litigation has been instituted against companies following periods of volatility in the market price of their securities. Any such litigation, if instituted against Intevac, could result in substantial costs and diversion of management time and attention.

We may not be able to obtain export licenses from the U.S. government permitting delivery of our products to international customers.

Many of our products, especially Photonics' products, require export licenses from U.S. government agencies under the Export Administration Act, the Trading with the Enemy Act of 1917, the Arms Export Act of 1976 or the International Traffic in Arms Regulations. These regulations limit the potential market for some of our products. We can give no assurance that we will be successful in obtaining all the licenses necessary to export our products. Heightened government scrutiny of export licenses for defense related products has resulted in lengthened review periods for our license applications. Exports to countries that are not considered by the U.S. government to be allies are likely to be prohibited, and even sales to U.S. allies may be limited. Failure to comply with export control laws, including identification and reporting of all exports and re-exports of controlled

technology or exports made without correct license approval or improper license use could result in severe penalties and revocation of licenses. Failure to obtain export licenses, delays in obtaining licenses, or revocation of previously issued licenses would prevent us from selling the affected products outside the United States and could negatively impact our results of operations.

The Photonics business is dependent on U.S. government contracts, which are subject to fixed pricing, immediate termination and a number of procurement rules and regulations.

We sell our Photonics products and services directly to the U.S. government, as well as to prime contractors for various U.S. government programs. The U.S. government is considering significant changes in the level of existing, follow-on or replacement programs. We cannot predict the impact of potential changes in priorities due to military transformations and/or the nature of future war-related activities. A shift of government priorities to programs in which we do not participate and/or reductions in funding for or the termination of programs in which we do participate, unless offset by other programs and opportunities, could have a material adverse effect on our financial position, results of operations, or cash flows.

Funding of multi-year government programs is subject to congressional appropriations, and there is no guarantee that the U.S. government will make further appropriations, particularly given the U.S. government's recent focus on spending in other areas and spending reductions. Sales to the U.S. government and its prime contractors may also be affected by changes in procurement policies, budget considerations and political developments in the United States or abroad. For example, if the U.S. government is less focused on defense spending or there is a decrease in hostilities, demand for our products could decrease. The loss of funding for a government program would result in a loss of future revenues attributable to that program. The influence of any of these factors, which are beyond our control, could negatively impact our results of operations.

A significant portion of our U.S. government revenue is derived from fixed-price development and production contracts. Under fixed-price contracts, unexpected increases in the cost to develop or manufacture a product, whether due to inaccurate estimates in the bidding process, unanticipated increases in material costs, reduced production volumes, inefficiencies or other factors, are borne by us. We have experienced cost overruns in the past that have resulted in losses on certain contracts, and may experience additional cost overruns in the future. We are required to recognize the total estimated impact of cost overruns in the period in which they are first identified. Such cost overruns could have a material adverse effect on our results of operations.

Generally, government contracts contain provisions permitting termination, in whole or in part, without prior notice at the government's convenience upon the payment of compensation only for work done and commitments made at the time of termination. We cannot ensure that one or more of the government contracts under which we, or our customers, operate will not be terminated under these circumstances. Also, we cannot ensure that we, or our customers, would be able to procure new government contracts to offset the revenues lost as a result of any termination of existing contracts, nor can we ensure that we, or our customers, will continue to remain in good standing as federal contractors.

As a U.S. government contractor we must comply with specific government rules and regulations and are subject to routine audits and investigations by U.S. government agencies. If we fail to comply with these rules and regulations, the results could include: (1) reductions in the value of our contracts; (2) reductions in amounts previously billed and recognized as revenue; (3) contract modifications or termination; (4) the assessment of penalties and fines; and (5) suspension or debarment from government contracting or subcontracting for a period of time or permanently.

Changes to our effective tax rate affect our results of operations.

As a global company, we are subject to taxation in the United States, Singapore and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future effective tax rate could be affected by: (1) changes in tax laws; (2) the allocation of earnings to countries with differing tax rates;

(3) changes in worldwide projected annual earnings in current and future years; (4) accounting pronouncements; or (5) changes in the valuation of our deferred tax assets and liabilities. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be different from the treatment reflected in our historical income tax provisions and accruals, which could result in additional payments by Intevac.

Our success depends on international sales and the management of global operations.

In previous years, the majority of our revenues have come from regions outside the United States. Most of our international sales are to customers in Asia, which includes products shipped to overseas operations of U.S. companies. We currently have manufacturing facilities in California and Singapore and international customer support offices in Singapore, China, and Malaysia. We expect that international sales will continue to account for a significant portion of our total revenue in future years. Certain of our suppliers are also located outside the United States.

Managing our global operations presents challenges including, but not limited to, those arising from: (1) global trade issues; (2) variations in protection of intellectual property and other legal rights in different countries; (3) concerns of U.S. governmental agencies regarding possible national commercial and/or security issues posed by growing manufacturing business in Asia; (4) fluctuation of interest rates, raw material costs, labor and operating costs, and exchange rates; (5) variations in the ability to develop relationships with suppliers and other local businesses; (6) changes in the laws and regulations of the United States, including export restrictions, and other countries, as well as their interpretation and application; (7) the need to provide technical and spares support in different locations; (8) political and economic instability; (9) cultural differences; (10) varying government incentives to promote development; (11) shipping costs and delays; (12) adverse conditions in credit markets; (13) variations in tariffs, quotas, tax codes and other market barriers; and (14) barriers to movement of cash.

We must regularly assess the size, capability and location of our global infrastructure and make appropriate changes to address these issues.

Difficulties in integrating past or future acquisitions could adversely affect our business.

We have completed a number of acquisitions and dispositions during our operating history. For example, in 2007, we acquired certain assets of DeltaNu, LLC and certain assets of Creative Display Systems, LLC, in 2008 we acquired certain assets of OC Oerlikon Balzers Ltd., in 2010 we acquired the outstanding shares of SIT, in 2012 we completed the sale of certain semiconductor mainframe technology assets and in 2013 we completed the sale of the assets of DeltaNu. We have spent and may continue to spend significant resources identifying and pursuing future acquisition opportunities. Acquisitions involve numerous risks including: (1) difficulties in integrating the operations, technologies and products of the acquired companies; (2) the diversion of our management's attention from other business concerns; and (3) the potential loss of key employees of the acquired companies. Failure to achieve the anticipated benefits of the prior and any future acquisitions or to successfully integrate the operations of the companies we acquire could have a material and adverse effect on our business, financial condition and results of operations. Any future acquisitions could also result in potentially dilutive issuance of equity securities, acquisition or divestiture-related write-offs or the assumption of debt and contingent liabilities. In addition, we have made and will continue to consider making strategic divestitures. With any divestiture, there are risks that future operating results could be unfavorably impacted if targeted objectives, such as cost savings, are not achieved or if other business disruptions occur as a result of the divestiture or activities related to the divestiture.

We may be subject to additional impairment charges due to potential declines in the fair value of our assets.

As a result of our acquisitions, we have significant intangible assets and had significant goodwill on our balance sheet. We test these assets for impairment on a periodic basis as required, and whenever events or

changes in circumstances indicate that the carrying value may not be recoverable. The events or changes that could require us to test our intangible assets for impairment include: a significant reduction in our stock price, and as a result market capitalization, changes in our estimated future cash flows, as well as changes in rates of growth in our industry or in any of our reporting units. In the fourth quarter of 2012, as a result of a decline in our market capitalization and a reduction in our revenue expectations we recorded a goodwill impairment charge in the amount of \$18.4 million. We will continue to evaluate the carrying value of our intangible assets and if we determine in the future that there is a potential further impairment, we may be required to record additional charges to earnings which could materially adversely affect our financial results and could also materially adversely affect our business.

Our success is dependent on recruiting and retaining a highly talented work force.

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel, and has made companies increasingly protective of prior employees. It may be difficult for us to locate employees who are not subject to non-competition agreements and other restrictions.

The majority of our U.S. operations are located in California where the cost of living and of recruiting employees is high. Our operating results depend, in large part, upon our ability to retain and attract qualified management, engineering, marketing, manufacturing, customer support, sales and administrative personnel. Furthermore, we compete with industries such as the hard disk drive, semiconductor, and solar industries for skilled employees. Failure to retain existing key personnel, or to attract, assimilate or retain additional highly qualified employees to meet our needs in the future, could have a material and adverse effect on our business, financial condition and results of operations.

We are dependent on certain suppliers for parts used in our products.

We are a manufacturing business. Purchased parts constitute the largest component of our product cost. Our ability to manufacture depends on the timely delivery of parts, components and subassemblies from suppliers. We obtain some of the key components and subassemblies used in our products from a single supplier or a limited group of suppliers. If any of our suppliers fail to deliver quality parts on a timely basis, we may experience delays in manufacturing, which could result in delayed product deliveries, increased costs to expedite deliveries or develop alternative suppliers, or require redesign of our products to accommodate alternative suppliers. Some of our suppliers are thinly capitalized and may be vulnerable to failure.

Our business depends on the integrity of our intellectual property rights.

The success of our business depends upon the integrity of our intellectual property rights, and we cannot ensure that: (1) any of our pending or future patent applications will be allowed or that any of the allowed applications will be issued as patents or will issue with claims of the scope we sought; (2) any of our patents will not be invalidated, deemed unenforceable, circumvented or challenged; (3) the rights granted under our patents will provide competitive advantages to us; (4) other parties will not develop similar products, duplicate our products or design around our patents; or (5) our patent rights, intellectual property laws or our agreements will adequately protect our intellectual property or competitive position.

From time to time, we have received claims that we are infringing third parties' intellectual property rights or seeking to invalidate our rights. We cannot ensure that third parties will not in the future claim that we have infringed current or future patents, trademarks or other proprietary rights relating to our products. Any claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us.

We could be involved in litigation.

From time to time we may be involved in litigation of various types, including litigation alleging infringement of intellectual property rights and other claims. Litigation is expensive, subjects us to the risk of significant damages and requires significant management time and attention and could have a material and adverse effect on our business, financial condition and results of operations.

We are subject to risks of non-compliance with environmental and other governmental regulations.

We are subject to a variety of governmental regulations relating to the use, storage, discharge, handling, emission, generation, manufacture, treatment and disposal of toxic or otherwise hazardous substances, chemicals, materials or waste. If we fail to comply with current or future regulations, such failure could result in suspension of our operations, alteration of our manufacturing process, remediation costs or substantial civil penalties or criminal fines against us or our officers, directors or employees. Additionally, these regulations could require us to acquire expensive remediation or abatement equipment or to incur substantial expenses to comply with them.

We are also subject to a variety of other governmental regulations and may incur significant costs associated with the compliance with these regulations. For example rules adopted by the SEC to implement the Dodd-Frank Wall Street Reform and Consumer Protection Act impose diligence and disclosure requirements regarding the use of “conflict” minerals mined from the Democratic Republic of Congo and adjoining countries in the products we manufacture. Compliance with these regulations is likely to result in additional costs and expenses or may affect the sourcing and availability of the components used in the products we manufacture.

Business interruptions could adversely affect our operations.

Our operations are vulnerable to interruption by fire, earthquake, floods or other natural disaster, quarantines or other disruptions associated with infectious diseases, national catastrophe, terrorist activities, war, disruptions in our computing and communications infrastructure due to power loss, telecommunications failure, human error, physical or electronic security breaches and computer viruses, and other events beyond our control. We do not have a detailed disaster recovery plan. Despite our implementation of network security measures, our tools and servers may be vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems and tools located at customer sites. Political instability could cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs or cause international currency markets to fluctuate. All these unforeseen disruptions and instabilities could have the same effects on our suppliers and their ability to timely deliver their products. In addition, we do not carry sufficient business interruption insurance to compensate us for all losses that may occur, and any losses or damages incurred by us could have a material adverse effect on our business and results of operations. For example, we self-insure earthquake risks because we believe this is the prudent financial decision based on the high cost of the limited coverage available in the earthquake insurance market. An earthquake could significantly disrupt our operations, most of which are conducted in California. It could also significantly delay our research and engineering effort on new products, most of which is also conducted in California. We take steps to minimize the damage that would be caused by business interruptions, but there is no certainty that our efforts will prove successful.

We could be negatively affected as a result of a proxy contest and the actions of activist stockholders.

A proxy contest with respect to election of our directors, or other activist stockholder activities, could adversely affect our business because: (i) responding to a proxy contest and other actions by activist stockholders can be costly and time-consuming, disruptive to our operations and divert the attention of management and our employees; (ii) perceived uncertainties as to our future direction caused by activist activities may result in the loss of potential business opportunities, and may make it more difficult to attract and retain qualified personnel and business partners; and (iii) if individuals are elected to our Board of Directors with a specific agenda, it may adversely affect our ability to effectively and timely implement our strategic plans.

[Table of Contents](#)

We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, and any adverse results from such evaluation could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, our management must perform evaluations of our internal control over financial reporting. Beginning in 2004, our Form 10-K has included a report by management of their assessment of the adequacy of such internal control. Additionally, our independent registered public accounting firm must publicly attest to the effectiveness of our internal control over financial reporting.

We have completed the evaluation of our internal controls over financial reporting as required by Section 404 of the Sarbanes-Oxley Act. Although our assessment, testing, and evaluation resulted in our conclusion that as of December 31, 2016, our internal controls over financial reporting were effective, we cannot predict the outcome of our testing in future periods. Ongoing compliance with this requirement is complex, costly and time-consuming. If Intevac fails to maintain effective internal control over financial reporting; our management does not timely assess the adequacy of such internal control; or our independent registered public accounting firm does not deliver an unqualified opinion as to the effectiveness of our internal control over financial reporting, then we could be subject to restatement of previously reported financial results, regulatory sanctions and a decline in the public's perception of Intevac, which could have a material and adverse effect on our business, financial condition and results of operations.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Intevac maintains its corporate headquarters in Santa Clara, California. The location, approximate size and type of facility of the principal properties are listed below. Intevac leases all of its properties and does not own any real estate.

<u>Location</u>	<u>Square Footage</u>	<u>Principal Use</u>
Santa Clara, CA	169,583	Corporate Headquarters; Thin-film Equipment and Photonics Marketing, Manufacturing, Engineering and Customer Support
Carlsbad, CA	10,360	Photonics Micro Display Product Manufacturing
Singapore	31,947	Thin-film Equipment Manufacturing and Customer Support
Malaysia	1,291	Thin-film Equipment Customer Support
Shenzhen, China	2,568	Thin-film Equipment Customer Support

Intevac considers these properties adequate to meet its current and future requirements. Intevac regularly assesses the size, capability and location of its global infrastructure and periodically makes adjustments based on these assessments.

Item 3. Legal Proceedings

From time to time, Intevac is involved in claims and legal proceedings that arise in the ordinary course of business. Intevac expects that the number and significance of these matters will increase as Intevac's business expands. Any claims or proceedings against us, whether meritorious or not, could be time consuming, result in costly litigation, require significant amounts of management time, result in the diversion of significant operational resources, or require us to enter into royalty or licensing agreements which, if required, may not be available on terms favorable to us or at all. Intevac is not presently a party to any lawsuit or proceeding that, in Intevac's opinion, is likely to seriously harm Intevac's business.

Item 4. Mine Safety Disclosures

Not applicable.

PART II**Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities****Price Range of Common Stock**

Intevac common stock is traded on The Nasdaq Stock Market (NASDAQ Global Select) under the symbol "IVAC." As of February 15, 2017, there were 94 holders of record. In fiscal years 2016 and 2015, Intevac did not declare or pay cash dividends to its stockholders. Intevac currently has no plans to declare or pay cash dividends.

The following table sets forth the high and low closing sale prices per share as reported on The Nasdaq Stock Market for the periods indicated.

	<u>High</u>	<u>Low</u>
Fiscal 2016:		
First Quarter	\$5.08	\$4.21
Second Quarter	5.74	4.35
Third Quarter	6.25	5.49
Fourth Quarter	8.55	5.65
Fiscal 2015:		
First Quarter	\$7.23	\$6.13
Second Quarter	6.14	4.80
Third Quarter	6.02	4.55
Fourth Quarter	5.34	4.49

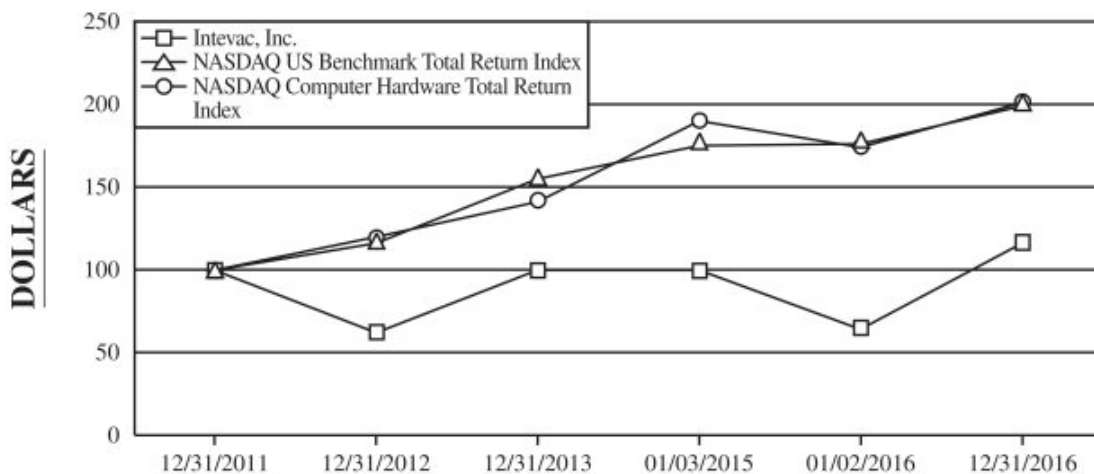
Recent Sales of Unregistered Securities

None.

Performance Graph

The following graph compares the cumulative total stockholder return on Intevac’s Common Stock with that of the NASDAQ US Benchmark Total Return Index and the NASDAQ Computer Hardware (Subsector) Total Return Index. The comparison assumes \$100 was invested on December 31, 2011 in Intevac Common Stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. The performance shown in the graph represents past performance and should not be considered an indication of future performance.

**COMPARISON OF CUMULATIVE TOTAL RETURN SINCE DECEMBER 31, 2011
AMONG INTEVAC, NASDAQ US BENCHMARK TOTAL RETURN INDEX AND
NASDAQ COMPUTER HARDWARE (SUBSECTOR) TOTAL RETURN INDEX**



	12/31/11	12/31/12	12/31/13	01/03/15	01/02/16	12/31/16
Intevac, Inc.	\$ 100	\$ 62	\$ 100	\$ 100	\$ 64	\$ 116
Nasdaq US Benchmark Total Return Index	100	116	155	175	176	199
Nasdaq Computer Hardware Total Return Index	100	120	141	190	174	201

Repurchases of Intevac Common Stock

The following table provides information as of December 31, 2016 with respect to the shares of common stock repurchased by Intevac during the fourth quarter of fiscal 2016.

	Total Number of Shares Purchased	Average Price Paid per Share	Aggregate Price Paid	Total Number of Shares Purchased as Part of Publicly Announced Program*	Maximum Dollar Value of Shares That May Yet be Purchased Under the Program*
(in thousands, except per share data)					
October 2, 2016 to October 29, 2016	—	\$ —	\$ —	—	\$ 1,507
October 30, 2016 to November 26, 2016	—	\$ —	\$ —	—	\$ 1,507
November 27, 2016 to December 31, 2016	—	\$ —	\$ —	—	\$ 1,507

* On November 21, 2013, the Board of Directors approved a stock repurchase program authorizing up to \$30 million in repurchases.

[Table of Contents](#)**Item 6. Selected Financial Data**

The following selected financial information has been derived from Intevac's historical audited consolidated financial statements and should be read in conjunction with the consolidated financial statements, the accompanying notes and Management's Discussion and Analysis of Financial Condition and Results of Operations for the corresponding fiscal years.

	Fiscal Year ⁽¹⁾				
	2016	2015	2014	2013	2012
	(in thousands, except per share data)				
Net revenues	\$ 80,124	\$ 75,160	\$ 65,550	\$ 69,632	\$ 83,424
Gross profit	\$ 30,409	\$ 26,317	\$ 17,433	\$ 21,973	\$ 34,158
Operating loss	\$ (7,563)	\$ (8,738)	\$ (19,354)	\$ (17,823)	\$ (42,533)
Net loss	\$ (7,441)	\$ (9,166)	\$ (27,445)	\$ (15,696)	\$ (55,319)
Loss per share:					
Basic and Diluted	\$ (0.36)	\$ (0.41)	\$ (1.16)	\$ (0.66)	\$ (2.37)
At year end:					
Total assets	\$ 108,324	\$ 97,681	\$ 120,275	\$ 148,276	\$ 172,503

- ¹ On February 19, 2014, the Board of Directors of the Company approved the Company's change to a 52-53 week fiscal year ending on the Saturday nearest to December 31 of each year in order to improve the alignment of financial and business processes and to streamline financial reporting. Each fiscal quarter consists of 13 weeks, with an occasional fourth quarter extending to 14 weeks, if necessary, for the fiscal year to end on the Saturday nearest to December 31. The Company's fiscal 2016, fiscal 2015 and fiscal 2014 years ended on December 31, 2016, January 2, 2016 and on January 3, 2015, respectively.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Management’s Discussion and Analysis (MD&A) is intended to facilitate an understanding of Intevac’s business and results of operations. This MD&A should be read in conjunction with Intevac’s Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included elsewhere in this Form 10-K. The following discussion contains forward-looking statements and should also be read in conjunction with the cautionary statement set forth at the beginning of this Form 10-K. MD&A includes the following sections:

- *Overview*: a summary of Intevac’s business, measurements and opportunities.
- *Results of Operations*: a discussion of operating results.
- *Liquidity and Capital Resources*: an analysis of cash flows, sources and uses of cash, contractual obligations and financial position.
- *Critical Accounting Policies*: a discussion of critical accounting policies that require the exercise of judgments and estimates.

Overview

Intevac is a provider of vacuum deposition equipment for a wide variety of thin-film applications, and a leading provider of digital night-vision technologies and products to the defense industry. The Company leverages its core capabilities in high-volume manufacturing of small substrates to provide process manufacturing equipment solutions to the HDD, DCP, and solar cell industries. Intevac also provides sensors, cameras and systems for government applications such as night vision and long-range target identification. Intevac’s customers include manufacturers of hard disk media, DCPs and solar cells as well as the U.S. government and its agencies, allies and contractors. Intevac reports two segments: Thin-film Equipment and Photonics. Effective in the first quarter of 2015, Intevac renamed the Equipment segment Thin-film Equipment.

Product development and manufacturing activities occur in North America and Asia. Intevac has field offices in Asia to support its Thin-film Equipment customers. Intevac’s products are highly technical and are sold primarily through Intevac’s direct sales force. Intevac also sells its products through distributors in Japan and China.

Intevac’s results are driven by a number of factors including success in its equipment growth initiatives in the DCP and solar markets and by worldwide demand for HDDs. Demand for HDDs depends on the growth in digital data creation and storage, the rate of areal density improvements, the end-user demand for PCs, enterprise data storage, nearline “cloud” applications, video players and video game consoles that include such drives. Intevac continues to execute its strategy of equipment diversification into new markets by introducing new products, such as for a thin-film PVD application for protective coating for DCP manufacturing and a thin-film PVD application for PV solar cell manufacturing. Intevac believes that expansion into these markets will result in incremental equipment revenues for Intevac and decrease Intevac’s dependence on the HDD industry. Intevac’s equipment business is subject to cyclical industry conditions, as demand for manufacturing equipment and services can change depending on supply and demand for HDDs, cell phones, and PV cells as well as other factors such as global economic conditions and technological advances in fabrication processes.

Fiscal Year	2016	2015	2014	Change	Change
	(in thousands, except percentages and per share amounts)			2016 vs. 2015	2015 vs. 2014
Net revenues	\$80,124	\$75,160	\$ 65,550	\$ 4,964	\$ 9,610
Gross profit	30,409	26,317	17,433	4,092	8,884
Gross margin percent	38.0%	35.0%	26.6%	3.0 points	8.4 points
Operating loss	(7,563)	(8,738)	(19,354)	1,175	10,616
Net loss	(7,441)	(9,166)	(27,445)	1,725	18,279
Net loss per diluted share	\$ (0.36)	\$ (0.41)	\$ (1.16)	\$ 0.05	\$ 0.75

[Table of Contents](#)

Fiscal 2014 financial results reflected a challenging environment. In the HDD industry media unit shipments grew slightly year over year, reversing a downward trend over the last few years and PC sales increased. These are primary drivers for demand for our HDD manufacturing equipment. During fiscal 2014, our HDD customers' media production capacity continued to exceed demand, which limited the near-term demand for our 200 Lean systems. The Company shipped only two 200 Lean systems to HDD manufacturers during 2014. In 2014 the PV market also improved as increased consumer demand for solar panels began to offset a global oversupply of production capacity experienced by solar cell manufacturers. In 2014, Intevac executed on its diversification strategy to enter into new and adjacent markets by introducing new products and shipped the first MATRIX PVD system for solar cell manufacturing and the first VERTEX coating system for DCPs. In fiscal 2014, Photonics business levels increased as Photonics delivered large scale production shipments of the pilot night-vision systems for the Apache helicopter. The fiscal 2014 net loss reflected lower net revenues, lower gross margins, lower operating expenses and higher income tax expenses from the establishment of a \$9.4 million deferred tax valuation allowance on the deferred tax assets in Singapore. Fiscal 2014 operating expenses reflected savings from cost reduction initiatives which were implemented in the first half of fiscal 2014, offset in part by increased costs associated with a contested Board of Directors election. During fiscal 2014, as part of an effort to lower cash expenditures but to continue to reward employees for their hard work, the Company modified certain executive incentive variable compensation programs to be settled in restricted stock units with a one year vesting and as a result recorded lower variable compensation expense. During fiscal 2014, the Company did not recognize an income tax benefit on the U.S. and Singapore net operating losses.

Fiscal 2015 financial results reflected a continued challenging environment. In the HDD industry media unit shipments declined year over year and PC sales decreased. PC sales were negatively impacted by price increases in Asian markets as a result of a stronger U.S. dollar against Asian currencies. During fiscal 2015, our HDD customers' media production capacity continued to exceed demand, which limited the near-term demand for our 200 Lean systems. The Company shipped only one 200 Lean system to a HDD manufacturer during 2015. In 2015 the PV market continued to improve as global solar panel installations increased 33% over the previous year. In 2015, Intevac continued to execute on its diversification strategy to enter into new and adjacent markets and revenue recognized the first MATRIX PVD system for solar cell manufacturing and the first VERTEX coating system for DCPs. Intevac also received new customer system orders for VERTEX coating systems for DCPs and MATRIX tools for both solar metallization and implant. In fiscal 2015, Photonics business levels decreased as both Photonics' product sales and Photonics' contract research and development ("R&D") declined. The fiscal 2015 net loss reflected higher net revenues, higher gross margins and lower operating expenses. Fiscal 2015 operating expenses reflected savings from cost reduction initiatives which were implemented in the first half of fiscal 2015. During fiscal 2015, as part of a continued effort to lower cash expenditures, the Company settled certain executive incentive variable compensation programs with restricted stock units with a one year vesting. During fiscal 2015, the Company did not recognize an income tax benefit on the U.S. and Singapore net operating losses.

Fiscal 2016 financial results reflected an improved environment. In 2016 the HDD industry began to show signs of improvement as media unit shipments and PC sales increased in the second half of the year. Intevac revenue recognized four 200 Lean systems with an additional four in backlog at the end of the year as one of our HDD customers upgraded the technology level of its manufacturing capacity. In 2016 Intevac gained traction with its entry into the DCP market and booked its first production capacity order. In 2016, Intevac recognized revenue on one VERTEX coating system for DCPs and shipped an additional four VERTEX systems that are undergoing installation and acceptance testing. In 2016 the PV market showed signs of stress as utility-scale solar projects came under pricing pressure and retail deployments were below expectations as U.S. consumers delayed spending as a result of the extension of the ITC. In 2016, Intevac recognized revenue on one MATRIX PVD system and one implant system for solar cell manufacturing and shipped an additional two Energ *i* implant systems that are undergoing installation and acceptance testing. In fiscal 2016, Photonics business levels were at similar levels compared to the prior year as increased Photonics' product sales were offset by lower Photonics' contract R&D. The fiscal 2016 net loss reflected higher net revenues and higher gross margins, offset in part by higher operating expenses as the Company made incremental R&D investments in both its business units. During

[Table of Contents](#)

fiscal 2016, as part of a continued effort to lower cash expenditures, the Company settled certain executive incentive variable compensation programs with restricted stock units with a one year vesting. During fiscal 2016, the Company did not recognize an income tax benefit on the U.S. and Singapore net operating losses.

Given the momentum we have built in our business, we believe that we are currently on the path to profitability in fiscal 2017. Intevac expects that HDD equipment sales will be approximately at the same levels as 2016 as a HDD manufacturer takes delivery of the four 200 Lean systems in backlog. In 2017, Intevac expects higher sales of new Thin-film Equipment products as Intevac revenue recognizes the four VERTEX coating systems and two Energ *i* implant systems that are currently undergoing installation activities at our customer sites and the one solar PVD MATRIX tool in backlog. For fiscal 2017, Intevac expects that Photonics business levels will be about the same levels as 2016 as Photonics continues to deliver production shipments of the pilot night-vision systems for the Apache helicopter and night-vision camera modules for the F35 Joint Strike Fighter program.

Results of Operations

Net revenues

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
Thin-film Equipment	\$45,253	\$39,622	\$25,290	\$ 5,631	\$ 14,332
Photonics			(in thousands)		
Products	29,089	28,450	29,173	639	(723)
Contract R&D	5,782	7,088	11,087	(1,306)	(3,999)
	<u>34,871</u>	<u>35,538</u>	<u>40,260</u>	<u>(667)</u>	<u>(4,722)</u>
Total net revenues	<u>\$80,124</u>	<u>\$75,160</u>	<u>\$65,550</u>	<u>\$ 4,964</u>	<u>\$ 9,610</u>

Net revenues consist primarily of sales of equipment used to manufacture thin-film disks, PV cells, DCPs and related equipment and system components; sales of low-light imaging products; and revenue from contract R&D related to the development of electro-optical sensors, cameras and systems.

The increase in Thin-film Equipment revenues in fiscal 2016 versus fiscal 2015 was due primarily to revenue recognized on four 200 Lean systems, one solar implant ENERG *i* system, one VERTEX coating system for DCPs and a MATRIX PVD system, offset in part by a decrease in revenue recognized on technology upgrades and spare parts. The increase in Thin-film Equipment revenues in fiscal 2015 versus fiscal 2014 was due primarily to revenue recognized on new PVD solar and DCP equipment including the first MATRIX PVD system and the first VERTEX coating system for DCPs as well as an increase in revenue recognized on technology upgrades and spare parts. Thin-film Equipment revenues in fiscal 2014 reflected lower revenue recognized on technology upgrades and spare parts. Intevac delivered four 200 Lean systems in 2016 compared to one 200 Lean system in fiscal 2015 and compared to two 200 Lean systems in fiscal 2014.

Photonics revenues decreased by 1.9% to \$34.9 million in fiscal 2016 versus fiscal 2015 and decreased by 11.7% to \$35.5 million in fiscal 2015 versus fiscal 2014. Contract R&D revenue in fiscal 2016, fiscal 2015 and fiscal 2014 decreased sequentially as a result of a lower volume of contracts. In fiscal 2014 Intevac completed its major R&D contract with the U.S. Army to develop a pilot night-vision system for the Apache helicopter.

Photonics product revenue increased in fiscal 2016 versus fiscal 2015 due to increased shipments of night-vision camera modules for the F35 Joint Strike Fighter program, offset in part by lower shipments and lower average sales prices for the Apache pilot night-viewing camera. Photonics product revenue decreased in fiscal 2015 as a result of lower average sales prices for the Apache pilot night-viewing camera. Photonics product revenue in fiscal 2014 reflected the transition to large scale production deliveries for the Apache pilot night-viewing camera.

[Table of Contents](#)

In 2017, Photonics revenue is expected to be about the same level as in 2016. Substantial growth in future Photonics revenues is dependent on the proliferation of Intevac's technology into major military programs, continued defense spending, the ability to obtain export licenses for foreign customers and obtaining production subcontracts for these programs.

Backlog

	December 31, 2016	January 2, 2016
	(in thousands)	
Thin-film Equipment	\$ 46,283	\$ 19,337
Photonics	22,244	31,833
Total backlog	\$ 68,527	\$ 51,170

Thin-film Equipment backlog at December 31, 2016 includes four 200 Lean systems, four PVD coating systems for DCPs and three PV implant systems. Thin-film Equipment backlog at January 2, 2016 includes one PV deposition system, one PVD coating system for DCPs and two PV implant systems.

Significant portions of Intevac's revenues in any particular period have been attributable to sales to a limited number of customers. The following customers accounted for at least 10 percent of Intevac's consolidated net revenues in fiscal 2016, 2015, and 2014.

	2016	2015	2014
Seagate Technology	34%	22%	15%
U.S. Government	22%	26%	32%
Elbit Systems of America	10%	*	*
HGST	*	15%	17%

* Less than 10%

Revenue by geographic region

	Fiscal Year			Change	Change
	2016	2015	2014	2016 vs. 2015	2015 vs. 2014
	(in thousands)				
United States	\$42,048	\$49,034	\$51,584	\$ (6,986)	\$ (2,550)
Asia	37,143	23,855	9,931	13,288	13,924
Europe	933	2,271	4,035	(1,338)	(1,764)
Total net revenues	\$80,124	\$75,160	\$65,550	\$ 4,964	\$ 9,610

International sales include products shipped to overseas operations of U.S. companies. The decrease in sales to the U.S. region in 2016 versus 2015 was primarily due to no shipments of 200 Leans to factories in the U.S. compared to one 200 Lean delivered to a U.S. factory in 2015 and lower contract R&D, offset in part by revenue recognized on one MATRIX PVD system. The decrease in sales to the U.S. region in 2015 versus 2014 was primarily due to lower average sales prices for the Apache pilot night-viewing camera.

The increase in sales to the Asia region in 2016 versus 2015 was primarily due to increased equipment sales including four 200 Lean systems, one solar implant ENERG *i* system and one VERTEX coating system for DCPs, offset in part by a decrease in revenue recognized on technology upgrades and spare parts. The increase in sales to the Asia region in 2015 versus 2014 was primarily due to the sale of the first MATRIX PVD system for solar panels, the sale of the first VERTEX coating system for DCPs and higher sales of technology upgrades to disk manufacturers.

[Table of Contents](#)

The decrease in sales to the Europe region in 2016 versus 2015 and in 2015 versus 2014 was primarily due to lower sales of Photonics' digital night-vision cameras to a NATO customer. This contract ended in fiscal 2015.

Gross margin

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
	(in thousands, except percentages)				
Thin-film Equipment gross profit	\$14,847	\$12,852	\$ 167	\$ 1,995	\$ 12,685
% of Thin-film Equipment net revenues	32.8%	32.4%	0.7%		
Photonics gross profit	\$15,562	\$13,465	\$17,266	\$ 2,097	\$ (3,801)
% of Photonics net revenues	44.6%	37.9%	42.9%		
Total gross profit	\$30,409	\$26,317	\$17,433	\$ 4,092	\$ 8,884
% of net revenues	38.0%	35.0%	26.6%		

Cost of net revenues consists primarily of purchased materials and costs attributable to contract R&D, and also includes assembly, test and installation labor and overhead, customer-specific engineering costs, warranty costs, royalties, provisions for inventory reserves and scrap.

Thin-film Equipment gross margin was 32.8% in fiscal 2016 compared to 32.4% in fiscal 2015 and 0.7% in fiscal 2014. Fiscal 2016 gross margins improved slightly over fiscal 2015 due primarily to higher revenue levels, higher factory utilization and lower provisions for inventory reserves, offset in part by lower sales of higher-margin upgrades. Fiscal 2015 gross margins improved over fiscal 2014 due primarily to higher sales of higher-margin upgrades, higher factory utilization and lower provisions for inventory reserves. Fiscal 2014 gross margins reflect a \$3.1 million reserve against certain solar implant inventory. Gross margins in the Thin-film Equipment business vary depending on a number of factors, including product mix, product cost, system configuration and pricing, factory utilization, and provisions for excess and obsolete inventory.

Photonics gross margin was 44.6% in fiscal 2016 compared to 37.9% in fiscal 2015 and 42.9% in fiscal 2014. Fiscal 2016 gross margins improved over fiscal 2015 due primarily to higher margins on products and lower inventory provisions, offset in part by lower margins on contract R&D. Fiscal 2015 gross margins declined over fiscal 2014 due primarily to lower margins on products and contract R&D, higher manufacturing engineering costs, and higher inventory provisions, offset in part by lower provisions for loss contracts. Manufacturing costs for digital night-vision products decreased in fiscal 2016, 2015 and 2014 as a result of cost reductions and yield improvements.

Research and development

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
	(in thousands)				
Research and development expense	\$18,156	\$15,661	\$15,832	\$ 2,495	\$ (171)

Research and development expense consists primarily of salaries and related costs of employees engaged in and prototype materials used in ongoing research, design and development activities for PV cell manufacturing equipment, DCP manufacturing equipment, HDD disk sputtering equipment and Photonics products.

Research and development spending for Thin-film Equipment in fiscal 2016 and fiscal 2015 increased sequentially as a result of higher spending on PV development and DCP development. Thin-film Equipment research and development expense in fiscal 2015 and fiscal 2014 reflected lower spending due to costs recovered under NRE arrangements.

[Table of Contents](#)

Research and development spending increased for Photonics during 2016 as compared to 2015 due primarily to spending on a demonstrator monocular which Intevac is developing for evaluation by the U.S. Army. Research and development spending decreased for Photonics during 2015 as compared to 2014 due primarily to engineering efforts expended for product support activities including yield improvements and manufacturing costs reductions and included in product cost of sales. Research and development expenses do not include costs of \$4.5 million, \$5.1 million, and \$7.8 million, in 2016, 2015, and 2014, respectively, which are related to customer-funded contract R&D programs and therefore included in cost of net revenues.

Selling, general and administrative

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
	(in thousands)				
Selling, general and administrative expense	\$19,916	\$19,638	\$21,205	\$ 278	\$ (1,567)

Selling, general and administrative expense consists primarily of selling, marketing, customer support, financial and management costs. All domestic sales and the majority of international sales of HDD disk sputtering products in Asia are made through Intevac's direct sales force. Intevac also sells its Thin-film Equipment products through distributors in Japan and China. Intevac has offices in Singapore, Malaysia and China to support Intevac's Thin-film Equipment customers in Asia.

Selling, general and administrative expenses increased in 2016 over the amount spent in 2015 due primarily to costs associated with consolidation of our Photonics' manufacturing facilities and increased equity compensation expense. Selling, general and administrative expenses decreased in 2015 over the amount spent in 2014 due primarily due to lower legal expenses and savings from cost reduction initiatives offset in part by higher equity compensation expense and higher occupancy expenses.

Acquisition-related (benefit), net

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
	(in thousands)				
Acquisition-related (benefit), net	\$(100)	\$(244)	\$(250)	\$ 144	\$ 6

Acquisition-related (benefit), net, represents the change in the fair value of contingent consideration arrangements related to the SIT acquisition. See Note 7 "Contingent Consideration." in the notes to the consolidated financial statements for additional information related to the fair value of contingent consideration. Increases in the assessed likelihood of a higher payout under a contingent consideration arrangement contribute to increases in the fair value of the related liability. Conversely, decreases in the assessed likelihood of a higher payout under a contingent consideration arrangement contribute to decreases in the fair value of the related liability.

The benefits recognized during fiscal 2016, fiscal 2015 and fiscal 2014 are associated with changes in the fair value of the contingent consideration related to the revenue earnout obligation. We recorded liabilities on our consolidated balance sheet of \$4.1 million as of the original acquisition date for this contingent consideration arrangement and subsequently remeasured the liability to fair value, with changes in fair value reported in earnings. As a result of this remeasurement, we recorded a net gain of \$100,000, \$244,000 and \$250,000, respectively during fiscal 2016, fiscal 2015 and fiscal 2014.

Cost reduction plans

During the first quarter of fiscal 2015, Intevac substantially completed implementation of the 2015 cost reduction plan (the "2015 Plan"), which reduced expenses and reduced its workforce by 3 percent. The total cost

[Table of Contents](#)

of implementing the 2015 Plan was \$148,000 of which \$81,000 was reported under cost of net revenues and \$67,000 was reported under operating expenses. Substantially all cash outlays in connection with the 2015 Plan occurred in the first quarter of fiscal 2015. Implementation of the 2015 Plan reduced salary, wages and other employee-related expenses by approximately \$1.4 million on an annual basis.

During the first half of fiscal 2014, Intevac substantially completed implementation of the 2014 cost reduction plan (the “2014 Plan”), which reduced expenses and reduced its workforce by 6 percent. The total cost of implementing the 2014 Plan was \$288,000 of which \$43,000 was reported under cost of net revenues and \$245,000 was reported under operating expenses. Substantially all cash outlays in connection with the 2014 Plan occurred in the first half of fiscal 2014. Implementation of the 2014 Plan reduced salary, wages and other employee-related expenses by approximately \$2.1 million on an annual basis.

As of December 31, 2016, activities related to the 2015 and 2014 Plans were complete.

Interest income and other, net

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
Interest income and other, net	\$373	\$127	\$337	\$ 246	\$ (210)

Interest income and other, net in fiscal 2016 included \$195,000 of interest income on investments, \$136,000 of gains associated with the sale and disposal of fixed assets and \$30,000 earnout income from a divestiture, offset in part by \$99,000 of foreign currency losses. Interest income and other, net in fiscal 2015 included \$179,000 of interest income on investments and \$100,000 earnout income from a divestiture and \$80,000 of foreign currency gains, offset in part by \$271,000 in losses associated with the disposal of fixed assets. Interest income and other, net in fiscal 2014 included \$179,000 of interest income on investments and \$75,000 earnout income from a divestiture and \$11,000 of foreign currency gains. The increase in interest income in 2016 over 2015 reflected higher interest rates on Intevac’s investments, offset in part by lower invested balances. Interest income for 2015 was flat compared to 2014 as the impact of lower invested balances was offset by higher interest rates on Intevac’s investments.

Provision for income taxes

	Fiscal Year			Change 2016 vs. 2015	Change 2015 vs. 2014
	2016	2015	2014		
Provision for income taxes	\$251	\$555	\$8,428	\$ (304)	\$ (7,873)

Intevac’s effective income tax rate was (3.5%) for fiscal 2016, (6.4%) for fiscal 2015 and (44.3%) for fiscal 2014. Intevac’s tax rate differs from the applicable statutory rates due primarily to establishment of a valuation allowance, the utilization of deferred and current credits and the effect of permanent differences and adjustments of prior permanent differences. Intevac’s future effective income tax rate depends on various factors including, the level of Intevac’s projected earnings, the geographic composition of worldwide earnings, tax regulations governing each region, net operating loss carry forwards, availability of tax credits and the effectiveness of Intevac’s tax planning strategies. Management carefully monitors these factors and timely adjusts the effective income tax rate accordingly.

Management assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use the existing deferred tax assets. A significant element of objective negative evidence evaluated was the cumulative loss incurred over the three-year periods ended January 3, 2015, December 31, 2013 and December 31, 2012. Such objective evidence limits the ability to consider other

[Table of Contents](#)

subjective evidence such as Intevac's projections for future growth. On the basis of this analysis and the significant negative objective evidence, for fiscal 2014, a valuation allowance of \$9.4 million was added to record only the portion of the Singapore deferred tax asset that more likely than not will be realized. For fiscal 2016 a valuation allowance decrease of \$136,000 and for fiscal 2015 a valuation allowance increase of \$631,000 for the Singapore deferred tax asset were recorded.

In fiscal 2012, a valuation allowance of \$23.4 million was added to record only the portion of the U.S. federal deferred tax asset that more likely than not will be realized. For fiscal 2016, 2015 and 2014, valuation allowance increases of \$3.3 million, \$1.6 million and \$4.7 million, respectively for the U.S. federal deferred tax assets were recorded.

The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are increased, or if objective negative evidence in the form of cumulative losses is no longer present and additional weight may be given to subjective evidence such as our projections for growth.

Liquidity and Capital Resources

At December 31, 2016, Intevac had \$48.2 million in cash, cash equivalents, and investments compared to \$46.6 million at January 2, 2016. During fiscal 2016, cash, cash equivalents and investments increased by \$1.6 million due primarily to cash generated by operating activities and the sale of Intevac common stock to Intevac's employees through Intevac's employee benefit plans partially offset by purchases of fixed assets.

Cash, cash equivalents and investments consist of the following:

	December 31, 2016	January 2, 2016
	(in thousands)	
Cash and cash equivalents	\$ 27,043	\$ 13,746
Short-term investments	17,602	23,208
Long-term investments	3,593	9,673
Total cash, cash-equivalents and investments	<u>\$ 48,238</u>	<u>\$ 46,627</u>

Cash generated by operating activities totaled \$3.8 million in 2016 and \$635,000 in 2015. Improved operating cash flow in 2016 was a result of a smaller net loss adjusted to exclude the effect of non-cash charges including deferred taxes, depreciation, amortization, changes in the fair value of acquisition-related contingent consideration, and equity-based compensation. Intevac continues to carefully manage working capital.

Accounts receivable totaled \$17.4 million at December 31, 2016 compared to \$12.3 million at January 2, 2016. The number of days outstanding for Intevac's accounts receivable was 66 at December 31, 2016 compared to 67 at January 2, 2016. Net inventories totaled \$24.9 million at December 31, 2016 compared to \$18.8 million at January 2, 2016. Net inventories at December 31, 2016 include four VERTEX systems for DCP and two Energ *i* implant systems at customer sites that are undergoing installation and acceptance testing. Inventory turns were 2.3 in fiscal 2016 and were 1.5 in fiscal 2015. Accounts payable totaled \$5.3 million at December 31, 2016 compared to \$6.0 million at January 2, 2016. Other accrued liabilities increased to \$17.0 million at December 31, 2016 compared to \$5.6 million at January 2, 2016. Other accrued liabilities at December 31, 2016 includes \$14.2 million in deferred revenue related to four VERTEX systems for DCP and two Energ *i* implant systems at customer sites that are undergoing installation and acceptance testing. Customer advances increased from \$3.6 million at January 2, 2016 to \$5.4 million at December 31, 2016.

Investing activities generated cash of \$8.6 million in 2016, \$8.7 million in 2015, and \$10.1 million in 2014. Proceeds from sales and maturities of investments, net of purchases, totaled \$11.6 million in 2016, \$11.8 million

[Table of Contents](#)

in 2015, and \$15.5 million in 2014. Intevac is required to maintain a standby letter of credit for \$1.0 million for the Santa Clara, California campus lease. This standby letter of credit is secured with \$1.0 million of restricted cash. Intevac has pledged \$602,000 as collateral for various guarantees with its bank. Capital expenditures were \$3.4 million in 2016, \$3.1 million in 2015, and \$3.7 million in 2014.

Financing activities generated cash of \$1.0 million in 2016, and used cash of \$16.9 million in 2015 and of \$5.9 million in 2014. In November 2013, Intevac's Board of Directors approved a stock repurchase program authorizing up to \$30 million in repurchases. Cash used to repurchase common stock totaled \$18.5 million in 2015 and \$8.4 million in 2014. The sale of Intevac common stock to Intevac's employees through Intevac's employee benefit plans provided \$1.5 million in 2016, \$1.7 million in 2015, and \$2.6 million in 2014. Tax payments related to the net share settlement of restricted stock units were \$426,000 in 2016, \$132,000 in 2015, and \$92,000 in 2014.

In connection with the acquisition of SIT, Intevac agreed to pay to the selling shareholders in cash a revenue earnout on Intevac's net revenue from commercial sales of certain solar implant products over a specified period up to an aggregate of \$9.0 million. As of December 31, 2016, payments made associated with the revenue earnout obligation have not been significant.

Intevac's investment portfolio consists principally of investment grade money market mutual funds, U.S. treasury and agency securities, commercial paper, municipal bonds and corporate bonds. Intevac regularly monitors the credit risk in its investment portfolio and takes measures, which may include the sale of certain securities, to manage such risks in accordance with its investment policies.

As of December 31, 2016, approximately \$11.4 million of cash and cash equivalents were domiciled in foreign tax jurisdictions. Intevac expects a significant portion of these funds to remain off shore in the short term. If the Company chose to repatriate these funds to the United States, it would be required to accrue and pay additional taxes on any portion of the repatriation where no United States income tax had been previously provided.

Intevac believes that its existing cash, cash equivalents and investments will be sufficient to meet Intevac's cash requirements for the next 12 months. Intevac intends to undertake approximately \$5.0 million - \$6.0 million in capital expenditures during the next 12 months.

Contractual Obligations

The following table summarizes Intevac's contractual obligations as of December 31, 2016:

	Total	Payments due by period			
		< 1 Year	1-3 Years	3-5 Years	> 5 Years
Operating lease obligations	\$20,907	\$ 2,824	\$ 5,642	\$ 5,664	\$ 6,777
Purchase obligations and commitments ¹	8,738	8,738	—	—	—
Other long-term liabilities ^{2, 4}	178	178	—	—	—
Total ^{3, 4}	<u>\$29,823</u>	<u>\$11,740</u>	<u>\$ 5,642</u>	<u>\$ 5,664</u>	<u>\$ 6,777</u>

- ¹ Purchase obligations include agreements to purchase goods or services that are enforceable and legally binding on Intevac and that specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty. These purchase obligations are related principally to inventory and other items.
- ² Intevac is unable to reliably estimate the timing of future payments related to uncertain tax positions; therefore, \$82,000 of unrecognized tax benefits has been excluded from the table above.

[Table of Contents](#)

- 3 Total excludes contractual obligations already recorded on the consolidated balance sheet as current liabilities (except other long-term liabilities) and certain purchase obligations.
- 4 Total excludes contingent consideration that may be paid pursuant to asset purchases or business combinations.

Off-Balance Sheet Arrangements

Off-balance sheet firm commitments relating to outstanding letters of credit amounted to approximately \$1.6 million as of December 31, 2016. These letters of credit and bank guarantees are collateralized by \$1.6 million of restricted cash. We do not maintain any other off-balance sheet arrangements, transactions, obligations, or other relationships that would be expected to have a material current or future effect on the consolidated financial statements.

Critical Accounting Policies

The preparation of consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 1 of Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies.

A critical accounting policy is defined as one that is both material to the presentation of Intevac's consolidated financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on Intevac's financial condition or results of operations. Specifically, these policies have the following attributes: (1) Intevac is required to make assumptions about matters that are highly uncertain at the time of the estimate; and (2) different estimates Intevac could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on Intevac's financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. Intevac bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as Intevac's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. These uncertainties are discussed in the section above entitled "Risk Factors." Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that Intevac's consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States of America, and provide a meaningful presentation of Intevac's financial condition and results of operations.

Management believes that the following are critical accounting policies:

Revenue Recognition

Intevac recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred and title and risk of loss have passed to Intevac's customer or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. Intevac's shipping terms are customarily FOB shipping point or equivalent terms. Intevac's revenue recognition policy generally results in revenue recognition at the following points: (1) for all transactions where legal title passes to the customer upon shipment, Intevac recognizes revenue upon shipment for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred, and that

[Table of Contents](#)

revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer acceptance; and (3) for arrangements containing multiple elements, the revenue relating to the undelivered elements is deferred until delivery of the deferred elements. When a sales arrangement contains multiple elements, Intevac allocates revenue to each element based on a selling price hierarchy. The selling price for a deliverable is based on its vendor specific evidence (“VSOE”) if available, third party evidence (“TPE”) if VSOE is not available, or best estimate of selling price (“ESP”) if neither VSOE nor TPE is available. Intevac generally utilizes the ESP due to the nature of its products. In certain cases, technology upgrade sales are accounted for as multiple-element arrangements, usually split between delivery of the parts and installation on the customer’s systems. In these cases, Intevac recognizes revenue for the relative sales price of the parts upon shipment and transfer of title, and recognizes revenue for the relative sales price of installation services when those services are completed. Revenue related to sales of spare parts is generally recognized upon shipment. Intevac recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the customer, the customer has made a written fixed commitment to purchase the finished goods, the customer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by Intevac. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms granted. Revenue related to services is generally recognized upon completion of the services. In addition, Intevac uses the installment method to record revenue based on cash receipts in situations where the account receivable is collected over an extended period of time and in management’s judgment the degree of collectibility is uncertain.

Intevac performs research and development work under various government-sponsored research contracts. Revenue on cost-plus-fee contracts is recognized to the extent of costs actually incurred plus a proportionate amount of the fee earned. Intevac considers fixed fees under cost-plus-fee contracts to be earned in proportion to the allowable costs actually incurred in performance of the contract. Revenue on fixed-price contracts is recognized on a milestone method or percentage-of-completion method of contract accounting. For contracts structured as milestone agreements, revenue is recognized when a specified milestone is achieved, provided that (1) the milestone event is substantive in nature and there is substantial uncertainty about the achievement of the milestone at the inception of the agreement, (2) the milestone payment is non-refundable, and (3) there is no continuing performance obligations associated with the milestone payment. Any milestone payments received prior to satisfying these revenue recognition criteria are deferred. Intevac generally determines the percentage completed based on the percentage of costs incurred to date in relation to total estimated costs expected through completion of the contract. When estimates of total costs to be incurred on a contract exceed estimates of total revenue to be earned, a provision for the entire loss on the contract is recorded in the period the loss is determined.

Inventories

Inventories are valued using average actual costs and are stated at the lower of cost or market. The carrying value of inventory is reduced for estimated obsolescence by the difference between its cost and the estimated market value based upon assumptions about future demand. Intevac evaluates the inventory carrying value for potential excess and obsolete inventory exposures by analyzing historical and anticipated demand. In addition, inventories are evaluated for potential obsolescence due to the effect of known and anticipated engineering change orders and new products. If actual demand were to be substantially lower than estimated, additional inventory adjustments for excess or obsolete inventory might be required, which could have a material adverse effect on Intevac’s business, financial condition and results of operations.

Warranty

Intevac estimates the costs that may be incurred under the warranty it provides and records a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by

[Table of Contents](#)

analyzing specific product and historical configuration statistics and regional warranty support costs. Intevac's warranty obligation is affected by product failure rates, material usage, and labor costs incurred in correcting product failures during the warranty period. As Intevac's customer service engineers and process support engineers are highly trained and deployed globally, labor availability is a significant factor in determining labor costs. The quantity and availability of critical replacement parts is another significant factor in estimating warranty costs. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required.

Income Taxes

Intevac accounts for income taxes by recognizing deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities, net operating losses and tax credit carryforwards. Deferred tax assets are also reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. Management has determined that it is more likely than not that its future taxable income will not be sufficient to realize its entire deferred tax assets.

The effective tax rate is highly dependent upon the geographic composition of worldwide earnings, tax regulations governing each region, non-tax deductible expenses and availability of tax credits. Management carefully monitors the changes in many factors and adjusts the effective income tax rate as required. If actual results differ from these estimates, Intevac could be required to record additional valuation allowances on deferred tax assets or adjust its effective income tax rate, which could have a material adverse effect on Intevac's business, financial condition and results of operations.

The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with Intevac's expectations could have a material impact on Intevac's results of operations and financial condition.

Valuation of Acquisition-Related Contingent Consideration

Contingent consideration related to a business combination is recorded at the acquisition date at the estimated fair value of the contingent payments. The acquisition date fair value is measured based on the consideration expected to be transferred (probability-weighted), discounted back to present value. The discount rate used is determined at the time of the acquisition in accordance with accepted valuation methods. The fair value of the acquisition-related contingent consideration is remeasured at the estimated fair value at each reporting period with the change in fair value recognized as income or expense in the consolidated statements of operations.

Equity-Based Compensation

Intevac records compensation expense for equity-based awards using the Black-Scholes option pricing model. This model requires Intevac to estimate the expected volatility of the price of Intevac's common stock and the expected life of the equity-based awards. Intevac also estimates the forfeiture of the equity-based awards. Estimating volatility, expected life and forfeitures requires significant judgment and an analysis of historical data. Intevac may have to increase or decrease compensation expense for equity-based awards if actual results differ significantly from Intevac's estimates.

[Table of Contents](#)**Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

Interest rate risk. Intevac's exposure to market risk for changes in interest rates relates primarily to its investment portfolio. Intevac does not use derivative financial instruments in Intevac's investment portfolio. The Company has adopted an investment policy and established guidelines relating to credit quality, diversification and maturities of its investments in order to preserve principal and maintain liquidity. All investment securities in Intevac's portfolio have an investment grade credit rating. Investments typically consist of commercial paper, obligations of the U.S. government and its agencies, corporate debt securities and municipal bonds.

The table below presents principal amounts and related weighted-average interest rates by year of expected maturity for Intevac's investment portfolio at December 31, 2016.

	2017	2018	Total	Fair Value
	(In thousands, except percentages)			
Cash equivalents				
Variable rate amounts	\$ 8,317	\$ —	\$ 8,317	\$ 8,317
Weighted-average rate	0.47%	—		
Short-term investments				
Fixed rate amounts	\$17,610	\$ —	\$17,610	\$17,602
Weighted-average rate	1.65%	—		
Long-term investments				
Fixed rate amounts	\$ —	\$3,607	\$ 3,607	\$ 3,593
Weighted-average rate	—	1.39%		
Total investment portfolio	\$25,927	\$3,607	\$29,534	\$29,512

Foreign exchange risk. From time to time, Intevac enters into foreign currency forward exchange contracts to hedge certain of its anticipated foreign currency re-measurement exposures and to offset certain operational exposures from the impact of changes in foreign currency exchange rates. The objective of these contracts is to minimize the impact of foreign currency exchange rate movements on Intevac's operating results. The derivatives have maturities of approximately 30 days. The notional amount of Company's foreign currency derivatives was \$1.1 million at December 31, 2016 and \$924,000 at January 2, 2016.

[Table of Contents](#)

Item 8. *Financial Statements and Supplementary Data*

INTEVAC, INC.
CONSOLIDATED FINANCIAL STATEMENTS

Contents

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	39
Report of Independent Registered Public Accounting Firm	40
Consolidated Balance Sheets	41
Consolidated Statements of Operations	42
Consolidated Statements of Comprehensive Income (Loss)	43
Consolidated Statements of Stockholders' Equity	44
Consolidated Statements of Cash Flows	45
Notes to Consolidated Financial Statements	46

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
Intevac, Inc.

We have audited the accompanying consolidated balance sheets of Intevac, Inc. (a Delaware corporation) and its subsidiaries (the “Company”) as of December 31, 2016 and January 2, 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders’ equity, and cash flows for each of the two years in the period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Intevac, Inc. and its subsidiaries as of December 31, 2016 and January 2, 2016, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company’s internal control over financial reporting as of December 31, 2016, based on the criteria established in the *Internal Control—Integrated Framework* (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated February 15, 2017 expressed an unqualified opinion thereon.

/s/ BPM LLP

San Jose, California
February 15, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
Intevac, Inc.

We have audited the accompanying consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows of Intevac, Inc. (a Delaware corporation) and subsidiaries (the "Company") for the year ended January 3, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of their operations and cash flows of Intevac, Inc. and subsidiaries for the year ended January 3, 2015 in conformity with accounting principles generally accepted in the United States of America.

/s/ GRANT THORNTON LLP

San Jose, California
February 17, 2015

INTEVAC, INC.
CONSOLIDATED BALANCE SHEETS

	December 31, 2016	January 2, 2016
	(In thousands, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 27,043	\$ 13,746
Short-term investments	17,602	23,208
Trade and other accounts receivable, net of allowances of \$0 at both December 31, 2016 and January 2, 2016	17,447	12,310
Inventories	24,876	18,760
Prepaid expenses and other current assets	1,768	1,712
Total current assets	88,736	69,736
Property, plant and equipment, net	11,237	11,921
Long-term investments	3,593	9,673
Restricted cash	1,602	1,780
Intangible assets, net of amortization of \$6,129 and \$5,275 at December 31, 2016 and January 2, 2016, respectively	2,258	3,112
Other long-term assets	898	1,459
Total assets	<u>\$ 108,324</u>	<u>\$ 97,681</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 5,323	\$ 5,950
Accrued payroll and related liabilities	4,220	4,066
Other accrued liabilities	17,011	5,632
Customer advances	5,422	3,625
Total current liabilities	31,976	19,273
Other long-term liabilities	3,082	2,411
Commitments and contingencies		
Stockholders' equity:		
Undesignated preferred stock, \$0.001 par value, 10,000 shares authorized, no shares issued and outstanding	—	—
Common stock, \$0.001 par value :		
Authorized shares — 50,000 issued and outstanding shares — 20,939 and 20,372 at December 31, 2016 and January 2, 2016, respectively	21	20
Additional paid-in capital	171,314	166,514
Treasury stock, 4,845 shares at both December 31, 2016 and January 2, 2016	(28,489)	(28,489)
Accumulated other comprehensive income	321	412
Accumulated deficit	(69,901)	(62,460)
Total stockholders' equity	73,266	75,997
Total liabilities and stockholders' equity	<u>\$ 108,324</u>	<u>\$ 97,681</u>

See accompanying notes.

INTEVAC, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended,		
	December 31, 2016	January 2, 2016	January 3, 2015
	(In thousands, except per share amounts)		
Net revenues:			
Systems and components	\$ 74,342	\$ 68,072	\$ 54,463
Technology development	5,782	7,088	11,087
Total net revenues	<u>80,124</u>	<u>75,160</u>	<u>65,550</u>
Cost of net revenues:			
Systems and components	45,263	43,700	40,284
Technology development	4,452	5,143	7,833
Total cost of net revenues	<u>49,715</u>	<u>48,843</u>	<u>48,117</u>
Gross profit	30,409	26,317	17,433
Operating expenses:			
Research and development	18,156	15,661	15,832
Selling, general and administrative	19,916	19,638	21,205
Acquisition-related (benefit), net	(100)	(244)	(250)
Total operating expenses	<u>37,972</u>	<u>35,055</u>	<u>36,787</u>
Operating loss	<u>(7,563)</u>	<u>(8,738)</u>	<u>(19,354)</u>
Interest income	195	179	179
Other income (expense), net	178	(52)	158
Loss before income taxes	(7,190)	(8,611)	(19,017)
Provision for income taxes	251	555	8,428
Net loss	<u>\$ (7,441)</u>	<u>\$ (9,166)</u>	<u>\$ (27,445)</u>
Net loss per share:			
Basic and diluted	\$ (0.36)	\$ (0.41)	\$ (1.16)
Weighted average shares outstanding:			
Basic and diluted	20,761	22,218	23,671

See accompanying notes.

INTEVAC, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended		
	December 31, 2016	January 2, 2016	January 3, 2015
	(In thousands)		
Net loss	\$ (7,441)	\$ (9,166)	\$ (27,445)
Other comprehensive loss, before tax			
Change in unrealized net loss on available-for-sale investments	18	(39)	(35)
Foreign currency translation losses	(109)	(168)	(71)
	(91)	(207)	(106)
Income tax expense related to items in other comprehensive loss	—	—	—
Other comprehensive loss, net of tax	(91)	(207)	(106)
Comprehensive loss	<u>\$ (7,532)</u>	<u>\$ (9,373)</u>	<u>\$ (27,551)</u>

See accompanying notes.

INTEVAC, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)

	Common Stock			Additional Paid-In Capital	Treasury Stock		Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			Shares	Amount			
Balance at December 31, 2013	23,767	\$ 24	\$ 156,359	241	\$ (1,688)	\$ 725	\$ (25,849)	\$ 129,571	
Shares issued in connection with:									
Exercise of stock options	190	—	948	—	—	—	—	948	
Settlement of RSUs	72	—	—	—	—	—	—	—	
Employee stock purchase plan	444	—	1,611	—	—	—	—	1,611	
Shares withheld in connection with net share settlement of RSUs	(13)	—	(92)	—	—	—	—	(92)	
Equity-based compensation expense	—	—	2,445	—	—	—	—	2,445	
Net loss	—	—	—	—	—	—	(27,445)	(27,445)	
Other comprehensive loss	—	—	—	—	—	(106)	—	(106)	
Common stock repurchases	(1,185)	(1)	—	1,185	(8,301)	—	—	(8,302)	
Balance at January 3, 2015	23,275	\$ 23	\$ 161,271	1,426	\$ (9,989)	\$ 619	\$ (53,294)	\$ 98,630	
Shares issued in connection with:									
Exercise of stock options	54	—	239	—	—	—	—	239	
Settlement of RSUs	113	—	—	—	—	—	—	—	
Employee stock purchase plan	374	—	1,460	—	—	—	—	1,460	
Shares withheld in connection with net share settlement of RSUs	(25)	—	(132)	—	—	—	—	(132)	
Equity-based compensation expense	—	—	3,296	—	—	—	—	3,296	
Grant of RSUs to settle accrued bonus	—	—	380	—	—	—	—	380	
Net loss	—	—	—	—	—	—	(9,166)	(9,166)	
Other comprehensive loss	—	—	—	—	—	(207)	—	(207)	
Common stock repurchases	(3,419)	(3)	—	3,419	(18,500)	—	—	(18,503)	
Balance at January 2, 2016	20,372	\$ 20	\$ 166,514	4,845	\$ (28,489)	\$ 412	\$ (62,460)	\$ 75,997	
Shares issued in connection with:									
Exercise of stock options	9	—	38	—	—	—	—	38	
Settlement of RSUs	269	—	—	—	—	—	—	—	
Employee stock purchase plan	384	1	1,450	—	—	—	—	1,451	
Shares withheld in connection with net share settlement of RSUs	(95)	—	(426)	—	—	—	—	(426)	
Equity-based compensation expense	—	—	3,254	—	—	—	—	3,254	
Grant of RSUs to settle accrued bonus	—	—	484	—	—	—	—	484	
Net loss	—	—	—	—	—	—	(7,441)	(7,441)	
Other comprehensive loss	—	—	—	—	—	(91)	—	(91)	
Balance at December 31, 2016	<u>20,939</u>	<u>\$ 21</u>	<u>\$ 171,314</u>	<u>4,845</u>	<u>\$ (28,489)</u>	<u>\$ 321</u>	<u>\$ (69,901)</u>	<u>\$ 73,266</u>	

See accompanying notes.

INTEVAC, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended		
	December 31, 2016	January 2, 2016	January 3, 2015
	(In thousands)		
Operating activities			
Net loss	\$ (7,441)	\$ (9,166)	\$ (27,445)
Adjustments to reconcile net loss to net cash and cash equivalents provided by (used in) operating activities:			
Depreciation & amortization	3,983	3,743	3,769
Net amortization (accretion) of investment premiums and discounts	128	319	655
Amortization of intangible assets	854	854	936
Equity-based compensation	3,744	3,620	3,000
Deferred income taxes	9	(12)	(728)
Deferred income taxes valuation allowance	—	—	9,394
Change in the fair value of acquisition-related contingent consideration	(100)	(244)	(250)
Loss (gain) on disposal of equipment	(136)	271	41
Changes in assets and liabilities:			
Accounts receivable	(5,137)	(223)	2,950
Inventories	(6,116)	452	3,550
Prepaid expenses and other assets	496	(1,382)	(166)
Accounts payable	(627)	1,310	629
Accrued payroll and other accrued liabilities	12,329	19	2163
Customer advances	1,797	1,074	(1,192)
Total adjustments	11,224	9,801	24,751
Net cash and cash equivalents provided by (used in) operating activities	3,783	635	(2,694)
Investing activities			
Purchase of investments	(12,429)	(21,058)	(35,703)
Proceeds from sales and maturities of investments	24,005	32,900	51,225
Proceeds from sale of equipment	208	11	13
Decrease (increase) in restricted cash	178	—	(1,780)
Purchase of equipment	(3,373)	(3,117)	(3,705)
Net cash and cash equivalents provided by investing activities	8,589	8,736	10,050
Financing activities			
Proceeds from issuance of common stock	1,489	1,699	2,559
Common stock repurchases	—	(18,503)	(8,392)
Taxes paid related to net share settlement	(426)	(132)	(92)
Payment of acquisition-related contingent consideration	(31)	—	—
Net cash and cash equivalents provided by (used in) financing activities	1,032	(16,936)	(5,925)
Effect of exchange rate changes on cash	(107)	(171)	(70)
Net increase (decrease) in cash and cash equivalents	13,297	(7,736)	1,361
Cash and cash equivalents at beginning of period	13,746	21,482	20,121
Cash and cash equivalents at end of period	\$ 27,043	\$ 13,746	\$ 21,482
Cash paid (received) for:			
Income taxes	\$ 516	\$ 1,190	\$ 378
Income tax refund	\$ (524)	\$ —	\$ —

See accompanying notes.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Intevac, Inc. and its subsidiaries (Intevac or the Company) after elimination of inter-company balances and transactions.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates.

Change in Fiscal Year End Date

On February 19, 2014, the Board of Directors of the Company approved the Company's change to a 52-53 week fiscal year ending on the Saturday nearest to December 31 of each year in order to improve the alignment of financial and business processes and to streamline financial reporting. Each fiscal quarter consists of 13 weeks, with an occasional fourth quarter extending to 14 weeks, if necessary, for the fiscal year to end on the Saturday nearest to December 31. The Company's fiscal 2016, fiscal 2015 and fiscal 2014 years ended on December 31, 2016, January 2, 2016 and on January 3, 2015, respectively.

Cash, Cash Equivalents and Investments

Intevac considers all highly liquid investments with original maturities of three months or less when purchased to be cash equivalents. Available-for-sale securities, comprised of commercial paper, obligations of the U.S. government and its agencies, corporate debt securities and municipal bonds, are carried at fair value, with unrealized gains and losses recorded within other comprehensive income (loss) as a separate component of stockholders' equity. Realized gains and losses and declines in value judged to be other than temporary, if any, on available-for-sale securities are included in earnings. Purchases and sales of investment securities are recognized on a trade date basis. The cost of investment securities sold is determined by the specific identification method.

Restricted Cash

Restricted cash of \$1.0 million as of December 31, 2016 secures a standby letter of credit obligation associated with a lease obligation and the restriction on the cash will be removed when the letter of credit expires. In addition Intevac pledged \$602,000 as collateral for various guarantees with its bank.

Derivative Instruments and Hedging Arrangements

Foreign Exchange Exposure Management — Intevac enters into forward foreign currency contracts that economically hedge the gains and losses generated by the re-measurement of certain recorded assets and liabilities in a non-functional currency and to offset certain operational exposures from the impact of changes in foreign currency exchange rates. Such exposures result from the portion of the Company's operations, assets and liabilities that are denominated in currencies other than the U.S. dollar, primarily the Singapore dollar. These foreign currency exchange contracts are entered into to support transactions made in the normal course of business, and accordingly, are not speculative in nature. The contracts are for periods consistent with the terms of the underlying transactions, generally one year or less. Changes in the fair value of these undesignated hedges are recognized in other income (expense), net immediately as an offset to the changes in the fair value of the asset or liability being hedged.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Fair Value Measurement—Definition and Hierarchy

Intevac reports certain financial assets and liabilities at fair value. Intevac defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair value measurements are classified and disclosed in one of the following three categories:

Level 1—Valuations based on quoted prices in active markets for identical assets or liabilities.

Level 2—Valuations based on other than quoted prices in active markets for identical assets and liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3—Valuations based on inputs that are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

Trade Accounts Receivables and Doubtful Accounts

Intevac evaluates the collectibility of trade accounts receivable on an ongoing basis and provides reserves against potential losses when appropriate. Management analyzes historical bad debts, customer concentrations, customer creditworthiness, changes in customer payment tendencies and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. Customer accounts are written off against the allowance when the amount is deemed uncollectible.

Inventories

Inventories are generally stated at the lower of cost or market, with cost determined on an average cost basis.

Property, Plant and Equipment

Equipment and leasehold improvements are stated at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets as follows: computers and software, 3 years; machinery and equipment, 5 years; furniture, 7 years; vehicles, 4 years; and leasehold improvements, remaining lease term.

Contingent Consideration and Purchased Intangible Assets

Contingent consideration related to a business combination is recorded at the acquisition date at the estimated fair value of the contingent payments. The acquisition date fair value is measured based on the consideration expected to be transferred (probability-weighted), discounted back to present value. The discount rate used is determined at the time of the acquisition in accordance with accepted valuation methods. The fair value of the acquisition-related contingent consideration is remeasured at the estimated fair value at each reporting period with the change in fair value recognized as income or expense in the consolidated statements of operations.

Purchased intangible assets other than goodwill are amortized over their useful lives unless these lives are determined to be indefinite. Purchased intangible assets are carried at cost, less accumulated amortization. Amortization is computed over the estimated useful lives of the respective assets, generally one to thirteen years using the straight line method. In 2012, as a result of its impairment analysis, Intevac wrote off all of the goodwill in both its Thin-film Equipment and Photonics reporting units.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Impairment of Long-Lived Assets

Long-lived assets and certain identifiable finite-lived intangible assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability of long-lived assets is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. Measurement of an impairment loss for long-lived assets and certain identifiable intangible assets that management expects to hold and use is based on the fair value of the asset. When an impairment loss is recognized, the carrying amount of the asset is reduced to its estimated fair value. No impairment charges were recognized in fiscal 2016, 2015 and 2014.

Income Taxes

Deferred tax assets and liabilities are recognized using enacted tax rates for the effect of temporary differences between book and tax bases of recorded assets and liabilities. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized.

On a quarterly basis, Intevac provides for income taxes based upon an annual effective income tax rate. The effective tax rate is highly dependent upon the level of Intevac's projected earnings, the geographic composition of worldwide earnings, tax regulations governing each region, net operating loss carryforwards, availability of tax credits and the effectiveness of Intevac's tax planning strategies. Intevac carefully monitors the changes in many factors and adjust its effective income tax rate on a timely basis. If actual results differ from the estimates, this could have a material effect on Intevac's business, financial condition and results of operations.

The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with Intevac's expectations could have a material effect on Intevac's business, financial condition and results of operations.

Intevac recognizes accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes.

Sales and Value Added Taxes

Taxes collected from customers and remitted to governmental authorities are presented on a net basis in the accompanying consolidated statements of operations.

Revenue Recognition

Intevac recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred and title and risk of loss have passed to Intevac's customer or services have been rendered, the price is fixed or determinable, and collectibility is reasonably assured. Intevac's shipping terms are customarily FOB shipping point or equivalent terms. Intevac's revenue recognition policy generally results in revenue recognition at the following points: (1) for all transactions where legal title passes to the customer upon shipment, Intevac recognizes revenue upon shipment for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred, and that revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer acceptance; and (3) for arrangements containing multiple elements, the revenue relating to the undelivered elements is deferred until delivery of the deferred elements. When a sales arrangement contains multiple elements, Intevac allocates revenue to each element based on a selling price hierarchy. The selling price for a deliverable is based

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

on its VSOE if available, TPE if VSOE is not available, or best ESP if neither VSOE nor TPE is available. Intevac generally utilizes the ESP due to the nature of its products. In certain cases, technology upgrade sales are accounted for as multiple-element arrangements, usually split between delivery of the parts and installation on the customer's systems. In these cases, Intevac recognizes revenue for the relative sales price of the parts upon shipment and transfer of title, and recognizes revenue for the relative sales price of installation services when those services are completed. Revenue related to sales of spare parts is generally recognized upon shipment. Intevac recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the customer, the customer has made a written fixed commitment to purchase the finished goods, the customer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by Intevac. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms granted. Revenue related to services is generally recognized upon completion of the services. In addition, Intevac uses the installment method to record revenue based on cash receipts in situations where the account receivable is collected over an extended period of time and in management's judgment the degree of collectibility is uncertain.

Intevac performs research and development work under various government-sponsored research contracts. Revenue on cost-plus-fee contracts is recognized to the extent of costs actually incurred plus a proportionate amount of the fee earned. Intevac considers fixed fees under cost-plus-fee contracts to be earned in proportion to the allowable costs actually incurred in performance of the contract. Revenue on fixed-price contracts is recognized on a milestone method or percentage-of-completion method of contract accounting. For contracts structured as milestone agreements, revenue is recognized when a specified milestone is achieved, provided that (1) the milestone event is substantive in nature and there is substantial uncertainty about the achievement of the milestone at the inception of the agreement, (2) the milestone payment is non-refundable, and (3) there is no continuing performance obligations associated with the milestone payment. Any milestone payments received prior to satisfying these revenue recognition criteria are deferred. Intevac generally determines the percentage completed based on the percentage of costs incurred to date in relation to total estimated costs expected through completion of the contract. When estimates of total costs to be incurred on a contract exceed estimates of total revenue to be earned, a provision for the entire loss on the contract is recorded in the period the loss is determined.

Advertising Costs

Advertising costs are expensed as incurred. Advertising costs were not material for all periods presented.

Foreign Currency Translation

The functional currency of Intevac's foreign subsidiaries in Singapore and Hong Kong and the Taiwan branch is the U.S. dollar. The functional currency of Intevac's foreign subsidiaries in China, Malaysia and Korea is the local currency of the country in which the respective subsidiary operates. Assets and liabilities recorded in foreign currencies are translated at year-end exchange rates; revenues and expenses are translated at average exchange rates during the year. The effect of foreign currency translation adjustments are included in stockholders' equity as a component of accumulated other comprehensive income in the accompanying consolidated balance sheets. The effects of foreign currency transactions are included in other income in the determination of net loss. Net income (losses) from foreign currency transactions were (\$99,000), \$80,000, and \$11,000 in 2016, 2015 and 2014, respectively.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Comprehensive Income

The changes in accumulated other comprehensive income by component, were as follows for the years ended December 31, 2016 and January 2, 2016:

	Foreign currency	Unrealized holding gains (losses) on available- for-sale investments (in thousands)	Total
Balance at January 3, 2015	\$ 620	\$ (1)	\$ 619
Other comprehensive loss before reclassification	(168)	(39)	(207)
Amounts reclassified from other comprehensive income	—	—	—
Net current-period other comprehensive loss	(168)	(39)	(207)
Balance at January 2, 2016	\$ 452	\$ (40)	\$ 412
Other comprehensive loss before reclassification	(109)	18	(91)
Amounts reclassified from other comprehensive income	—	—	—
Net current-period other comprehensive loss	(109)	18	(91)
Balance at December 31, 2016	\$ 343	\$ (22)	\$ 321

Employee Stock Plans

Intevac has equity-based compensation plans that provide for the grant to employees of equity-based awards, including incentive or non-statutory stock options, restricted stock, stock appreciation rights, restricted stock units (“RSUs”), performance units and performance bonus awards. In addition, these plans provide for the grant of non-statutory stock options and RSUs to non-employee directors and consultants. Intevac also has an employee stock purchase plan, which provides Intevac’s employees with the opportunity to purchase Intevac common stock at a discount through payroll deductions. See Note 2 for a complete description of these plans and their accounting treatment.

Recent Accounting Pronouncements

In July 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2015-11, *Inventory (Topic 330), Simplifying the Measurement of Inventory*. Under this update, subsequent measurement of inventory is based on the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and disposal. This update should be applied prospectively and will be adopted by Intevac in the first quarter of fiscal 2017. Early adoption is permitted. Intevac does not expect the adoption of this update to have a material impact on its consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09 *Revenue from Contracts with Customers (Topic 606)* that will supersede virtually all existing revenue guidance. This update affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets. The standard’s core principle is that a company will recognize revenue when it transfers promised goods or services

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under today's guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. This update should be applied retrospectively either to each prior reporting period presented in the financial statements, or only to the most current reporting period presented in the financial statements with a cumulative effect adjustment recorded in the retained earnings. In August 2015, the FASB issued an update to defer the effective date of this update by one year. This update becomes effective and will be adopted by Intevac in the first quarter of fiscal 2018. Early adoption is not permitted for reporting periods before the first quarter of fiscal 2017. The Company is currently evaluating the impact of this update on its consolidated financial statements.

The FASB has issued several more amendments to the new revenue standard ASU 2014-09, as amended by ASU 2015-14:

March 2016—ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*. ASU 2016-08 clarifies the implementation guidance on principal versus agent considerations. The guidance includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to customers.

April 2016—ASU 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*. ASU 2016-10 covers two specific topics: performance obligations and licensing. This ASU includes guidance on immaterial promised goods or services, shipping or handling activities, separately identifiable performance obligations, functional or symbolic intellectual property licenses, sales-based and usage-based royalties, license restrictions (time, use, geographical) and licensing renewals.

May 2016—ASU 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow Scope Improvements and Practical Expedients*. ASU 2016-12 clarifies certain core recognition principles including collectability, sales tax presentation, noncash consideration, contract modifications and completed contracts at transition and disclosures no longer required if the full retrospective transition method is adopted.

We are currently assessing how the adoption of these new standards will impact our consolidated financial statements.

In February 2016, the FASB issued Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)*, which amends the existing guidance to require lessees to recognize lease assets and lease liabilities arising from operating leases in a classified balance sheet. The requirements of this ASU are effective for interim and annual reporting periods beginning after December 15, 2018, and early adoption is permitted. We are currently evaluating the impact that ASU 2016-02 will have on our consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Compensation—Stock Compensation (Topic 718)*. This ASU makes several modifications to Topic 718 related to the accounting for forfeitures, employer tax withholding on share-based compensation and the financial statement presentation of excess tax benefits or deficiencies. The requirements of this ASU are effective for interim and annual reporting periods beginning after December 15, 2016, although early adoption is permitted. We are currently assessing how the adoption of this standard will impact our consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*. This ASU amends the impairment model to utilize an expected loss methodology in place of the currently used incurred

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

loss methodology, which will result in the more timely recognition of losses. The requirements of this ASU are effective for interim and annual reporting periods beginning after December 15, 2019. We are currently assessing how the adoption of this standard will impact our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Cash Payments*. This ASU provides guidance related to the classification of certain transactions on the statement of cash flows. The requirements of this ASU are effective for reporting periods beginning after December 15, 2017, with early adoption permitted. Intevac does not expect the adoption of this update to have a material impact on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-17, *Consolidation (Topic 810): Interests Held through Related Parties That Are under Common Control*, which amends the consolidation guidance on how a reporting entity that is the single decision maker of a VIE should treat indirect interests in the entity held through related parties that are under common control with the reporting entity when determining whether it is the primary beneficiary of that VIE. This new guidance is effective for reporting periods beginning after December 15, 2017, with early adoption permitted. We are currently assessing how the adoption of this standard will impact our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, which provides guidance on the classification of restricted cash in the statement of cash flows. This new guidance is effective for reporting periods beginning after December 15, 2017, with early adoption permitted. The amendments in the ASU should be adopted on a retrospective basis. Intevac does not expect the adoption of this update to have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805) : Clarifying the Definition of a Business*, which provides guidance on evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This new guidance is effective for reporting periods beginning after December 15, 2017, with early adoption permitted. The amendments in the ASU should be adopted on a retrospective basis. We are currently assessing how the adoption of this standard will impact our consolidated financial statements.

2. Equity-Based Compensation

Intevac accounts for share-based awards in accordance with the provisions of the accounting guidance which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees, consultants and directors based upon the grant-date fair value of those awards. The estimated fair value of Intevac's equity-based awards, less expected forfeitures, is amortized over the awards' service periods using the graded vesting attribution method.

Descriptions of Plans

Equity Incentive Plans

At December 31, 2016, Intevac had equity-based awards outstanding under the 2012 Equity Incentive Plan and the 2004 Equity Incentive Plan (the "Plans") and the 2003 Employee Stock Purchase Plan (the "ESPP"). Intevac's stockholders approved all of these plans.

The Plans are a broad-based, long-term retention program intended to attract and retain qualified management and employees, and align stockholder and employee interests. The Plans permit the grant of

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

incentive or non-statutory stock options, restricted stock, stock appreciation rights, RSUs and performance shares. Option price, vesting period, and other terms are determined by the administrator of the Plans, but the option price shall generally not be less than 100% of the fair market value per share on the date of grant. As of December 31, 2016, 5.5 million shares of common stock were authorized for future issuance under the Plans. The 2012 Plan expires no later than May 8, 2022.

2003 Employee Stock Purchase Plan

In 2003, Intevac's stockholders approved adoption of the ESPP, which serves as the successor to the Employee Stock Purchase Plan originally adopted in 1995. Upon adoption of the ESPP, all shares available for issuance under the prior plan were transferred to the ESPP. The ESPP provides that eligible employees may purchase Intevac common stock through payroll deductions at a price equal to 85% of the lower of the fair market value at the beginning of the applicable offering period or at the end of each applicable purchase interval. Offering periods are generally two years in length, and consist of a series of six-month purchase intervals. Eligible employees may join the ESPP at the beginning of any six-month purchase interval. Under the terms of the ESPP, employees can choose to have up to 15% of their base earnings withheld to purchase Intevac common stock. As of December 31, 2016, 242,000 shares remained available for issuance under the ESPP.

The effect of recording equity-based compensation for fiscal 2016, 2015 and 2014 was as follows (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Equity-based compensation by type of award:			
Stock options	\$ 880	\$ 963	\$1,094
RSUs	2,190	1,711	1,464
Employee stock purchase plan	674	946	442
Total equity-based compensation	<u>\$3,744</u>	<u>\$3,620</u>	<u>\$3,000</u>

Stock Options

The exercise price of each stock option equals the market price of Intevac's stock on the date of grant. Most options are scheduled to vest over three and/or four years and expire no later than ten years after the grant date. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. This model was developed for use in estimating the value of publicly traded options that have no vesting restrictions and are fully transferable. Intevac's employee stock options have characteristics significantly different from those of publicly traded options. The weighted-average assumptions used in the model are outlined in the following table:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Stock Options:			
Weighted-average fair value of grants per share	\$ 1.76	\$ 2.05	\$ 3.15
Expected volatility	43.86%	46.12%	52.12%
Risk free interest rate	0.97%	1.42%	1.39%
Expected term of options (in years)	4.28	3.99	4.38
Dividend yield	None	None	None

The computation of the expected volatility assumption used in the Black-Scholes calculations for new grants is based on historical volatility of Intevac's stock price. The risk-free interest rate is based on the yield available on U.S. Treasury Strips with an equivalent remaining term. The expected life of employee stock options

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

represents the weighted-average period that the stock options are expected to remain outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards and vesting schedules. The dividend yield assumption is based on Intevac's history of not paying dividends and the assumption of not paying dividends in the future.

A summary of the stock option activity is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Options outstanding at January 2, 2016	2,433,647	\$ 7.52	4.10	\$ 141,546
Options granted	422,500	\$ 4.88		
Options cancelled and forfeited	(107,230)	\$ 10.69		
Options exercised	(8,553)	\$ 4.47		
Options outstanding at December 31, 2016	<u>2,740,364</u>	\$ 7.00	3.64	\$5,837,900
Vested and expected to vest at December 31, 2016	2,624,994	\$ 7.07	3.55	\$5,476,403
Options exercisable at December 31, 2016	1,829,765	\$ 7.73	2.74	\$3,082,215

The total intrinsic value of options exercised during fiscal years 2016, 2015 and 2014 was \$13,000, \$65,000 and \$496,000, respectively. At December 31, 2016, Intevac had \$640,000 of total unrecognized compensation expense, net of estimated forfeitures, related to stock option plans that will be recognized over the weighted-average period of 1.17 years.

The options outstanding and currently exercisable at December 31, 2016 were in the following exercise price ranges:

	Options Outstanding			Options Exercisable	
	Number of Shares Outstanding	Weighted Average Remaining Contractual Term (years)	Weighted Average Exercise Price	Number Vested and Exercisable	Weighted Average Exercise Price
<u>Range of Exercise Prices</u>					
\$3.91 - —\$ 5.42	1,023,311	4.88	\$ 4.77	407,446	\$ 4.54
\$5.43 - \$7.37	924,908	3.93	\$ 6.61	660,729	\$ 6.61
\$7.38 - \$20.10	792,145	1.71	\$ 10.34	761,590	\$ 10.42
\$3.91 - \$20.10	<u>2,740,364</u>	3.64	\$ 7.00	<u>1,829,765</u>	\$ 7.73

RSUs

A summary of the RSU activity is as follows:

	Shares	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Non-vested RSUs at January 2, 2016	553,584	\$ 6.16	1.02	\$2,607,381
Granted	768,527	\$ 4.20		
Vested	(268,883)	\$ 6.46		
Cancelled	(103,773)	\$ 4.81		
Non-vested RSUs at December 31, 2016	<u>949,455</u>	\$ 4.64	1.04	\$8,117,840

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Time-based RSUs are converted into shares of Intevac common stock upon vesting on a one-for-one basis. Time-based RSUs typically are scheduled to vest over three and/or four years. Vesting of time-based RSUs is subject to the grantee's continued service with Intevac. The compensation expense related to these awards is determined using the fair market value of Intevac common stock on the date of the grant, and the compensation expense is recognized over the vesting period. At December 31, 2016, Intevac had \$1.4 million of total unrecognized compensation expense, net of estimated forfeitures, related to RSUs that will be recognized over the weighted-average period of 1.04 years.

Market condition-based RSUs vest upon the achievement of certain market conditions (our stock performance) during a set performance period (typically five years) subject to the grantee's continued service with Intevac through the date the applicable market condition is achieved. The fair value is based on the values calculated under the Monte Carlo simulation model on the grant date. Compensation cost is not adjusted in future periods for subsequent changes in the expected outcome of market related conditions. The compensation expense is recognized over the derived service period. Intevac granted 125,000 of such awards to certain executive officers in fiscal 2016. These awards have a derived service period of 2.8 years. The weighted-average assumptions used in the model are outlined in the following table.

	<u>2016</u>
Weighted-average fair value of grants per share	\$ 2.46
Expected volatility	47.65%
Risk free interest rate	1.35%
Expected term (in years)	4.79
Dividend yield	None

The annual bonus for certain participants in the Company's annual incentive plan for fiscal 2016 will be settled with RSUs with one year vesting issued in 2017. The Company accrued for the payment of bonuses at the expected company-wide payout percentage amount at December 31, 2016, which amounts were less than the target bonus amounts for each participant. The bonus accrual is classified as a liability until the number of shares is determined on the date the awards are granted, at which time the Company classifies the awards into equity. The Company recorded equity-based compensation expense related to the annual incentive plan of \$490,000 in fiscal 2016. At December 31, 2016, Intevac had \$566,000 of total unrecognized compensation expense, net of estimated forfeitures, related to the annual incentive plan that will be recognized over a remaining period of 1.15 years.

The annual bonus for certain participants in the Company's annual incentive plan for fiscal 2015 was settled with RSUs with one year vesting issued in 2016. The Company recorded equity-based compensation expense related to the annual incentive plan of \$324,000 in fiscal 2015. In February 2016, the annual bonus for certain participants was settled with RSUs with one year vesting. Thirty-four participants were granted stock awards to receive 266,000 shares of common stock with a weighted-average grant date fair value of \$4.40 per share.

The annual bonus for certain participants in the Company's annual incentive plan for fiscal 2014 was settled with RSUs with one year vesting issued in 2015. The Company recorded equity-based compensation expense related to the annual incentive plan of \$554,000 in fiscal 2014. In February 2015, the annual bonus for certain participants was settled with RSUs with one year vesting. Twenty-nine participants were granted stock awards to receive 133,000 shares of common stock with a weighted-average grant date fair value of \$6.85 per share.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

ESPP

The fair value of the employee stock purchase right is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Stock Purchase Rights:			
Weighted-average fair value of grants per share	\$ 1.55	\$ 2.14	\$ 2.08
Expected volatility	39.22%	43.45%	44.00%
Risk free interest rate	0.75%	0.45%	0.11%
Expected term of purchase rights (in years)	1.87	1.36	0.69
Dividend yield	None	None	None

The expected life of purchase rights is the period of time remaining in the current offering period.

The ESPP activity during fiscal 2016, 2015 and 2014 is as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands, except per share amounts)		
Shares purchased	384	374	444
Weighted-average purchase price per share	\$ 3.78	\$ 3.90	\$ 3.63
Aggregate intrinsic value of purchase rights exercised	\$ 514	\$ 688	\$ 1,444

As of December 31, 2016, Intevac had \$277,000 of total unrecognized compensation expense, net of estimated forfeitures related to purchase rights that will be recognized over the weighted-average period of 0.56 years.

3. Earnings Per Share

Intevac calculates basic earnings per share (“EPS”) using net income (loss) and the weighted-average number of shares outstanding during the reporting period. Diluted EPS includes the effect from potential issuance of common stock pursuant to the exercise of employee stock options and vesting of RSUs.

The following table sets forth the computation of basic and diluted loss per share:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands, except per share amounts)		
Net loss	<u>\$ (7,441)</u>	<u>\$ (9,166)</u>	<u>\$ (27,445)</u>
Weighted-average shares – basic	20,761	22,218	23,671
Effect of dilutive potential common shares	—	—	—
Weighted-average shares – diluted	<u>20,761</u>	<u>22,218</u>	<u>23,671</u>
Net loss per share – basic and diluted	<u>\$ (0.36)</u>	<u>\$ (0.41)</u>	<u>\$ (1.16)</u>

As the Company is in a net loss position, all of the Company’s equity instruments are considered antidilutive.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

4. Concentrations*Credit Risk and Significant Customers*

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist of cash equivalents, short- and long-term investments, restricted cash, and accounts receivable. Intevac generally invests its excess cash in money market funds, commercial paper, obligations of the U.S. government and its agencies, corporate debt securities and municipal bonds. The Company has adopted an investment policy and established guidelines relating to credit quality, diversification and maturities of its investments in order to preserve principal and maintain liquidity. All investment securities in Intevac's portfolio have an investment grade credit rating.

Intevac's accounts receivable tend to be concentrated in a limited number of customers. The following customers accounted for at least 10 percent of Intevac's accounts receivable at December 31, 2016 and January 2, 2016.

	<u>2016</u>	<u>2015</u>
Seagate Technology	55%	*
HGST	10%	37%
Western Digital	*	15%
U.S. Government	*	11%

* Less than 10%

Intevac's largest customers tend to change from period to period. Historically, a significant portion of Intevac's revenues in any particular period have been attributable to sales to a limited number of customers. Intevac performs credit evaluations of its customers' financial condition and generally requires deposits on system orders but does not generally require collateral or other security to support customer receivables.

The following customers accounted for at least 10 percent of Intevac's consolidated net revenues in fiscal 2016, 2015, and/or 2014.

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Seagate Technology	34%	22%	15%
U.S. Government	22%	26%	32%
Elbit Systems of America	10%	*	*
HGST	*	15%	17%

* Less than 10%

Products

Disk manufacturing products contributed a significant portion of Intevac's revenues in fiscal 2016, 2015, and 2014. Intevac expects that the ability to maintain or expand its current levels of revenues in the future will depend upon continuing market demand for its products; its success in enhancing its existing systems and developing and manufacturing competitive disk manufacturing equipment, such as the 200 Lean; its success in utilizing Intevac's expertise in complex manufacturing equipment to develop and sell new equipment products for PV and DCP manufacturing and Intevac's success in developing military products based on its low-light technology.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

5. Balance Sheet Details

Balance sheet details were as follows as of December 31, 2016 and January 2, 2016:

Trade and Other Accounts Receivable, Net

Receivables consisted of the following components:

	December 31, 2016	January 2, 2016
	(in thousands)	
Trade receivables and other	\$ 15,167	\$ 11,939
Unbilled costs and accrued profits	2,280	371
Less: allowance for doubtful accounts	—	—
	<u>\$ 17,447</u>	<u>\$ 12,310</u>

Inventories

Inventories are stated at the lower of average cost or market and consist of the following:

	December 31, 2016	January 2, 2016
	(in thousands)	
Raw materials	\$ 10,290	\$ 11,081
Work-in-progress	6,470	4,365
Finished goods	8,116	3,314
	<u>\$ 24,876</u>	<u>\$ 18,760</u>

Finished goods inventory consists primarily of completed systems at customer sites that are undergoing installation and acceptance testing.

Property, Plant and Equipment

	December 31, 2016	January 2, 2016
	(in thousands)	
Leasehold improvements	\$ 14,653	\$ 15,242
Machinery and equipment	41,678	42,317
	56,331	57,559
Less accumulated depreciation and amortization	45,094	45,638
Total property, plant and equipment, net	<u>\$ 11,237</u>	<u>\$ 11,921</u>

Customer Advances

Customer advances generally represent nonrefundable deposits invoiced by the Company in connection with receiving customer purchase orders and other events preceding acceptance of systems. Customer advances related to products that have not been shipped to customers and included in accounts receivable were \$53,000 at December 31, 2016.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Accounts Payable

Included in accounts payable is \$349,000 and \$582,000 of book overdraft at December 31, 2016 and January 2, 2016, respectively.

Other Accrued Liabilities

	December 31, 2016	January 2, 2016
	(in thousands)	
Deferred revenue	\$ 14,416	\$ 3,789
Accrued product warranties	829	835
Other taxes payable	660	378
Acquisition-related contingent consideration	329	179
Income taxes payable	246	234
Other	531	217
Total other accrued liabilities	<u>\$ 17,011</u>	<u>\$ 5,632</u>

Other Long-Term Liabilities

	December 31, 2016	January 2, 2016
	(in thousands)	
Deferred rent	\$ 2,392	\$ 1,190
Acquisition-related contingent consideration	430	711
Accrued income taxes	82	363
Accrued product warranties	178	147
Total other long-term liabilities	<u>\$ 3,082</u>	<u>\$ 2,411</u>

6. Purchased Intangible Assets, Net

Information regarding acquisition-related intangible assets is as follows:

	December 31, 2016			January 2, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(in thousands)					
Customer relationships	\$ 3,119	\$ 2,869	\$ 250	\$ 3,119	\$ 2,646	\$ 473
Purchased technology	5,148	3,140	2,008	5,148	2,509	2,639
Covenants not to compete	40	40	—	40	40	—
Backlog	80	80	—	80	80	—
Total amortizable intangible assets	<u>\$ 8,387</u>	<u>\$ 6,129</u>	<u>\$ 2,258</u>	<u>\$ 8,387</u>	<u>\$ 5,275</u>	<u>\$ 3,112</u>

Intangible assets by segment as of December 31, 2016 are as follows: Thin-film Equipment; \$2.0 million and Photonics; \$217,000.

Total amortization expense of purchased intangibles for fiscal 2016, 2015 and 2014 was \$854,000, \$854,000, and \$936,000 respectively.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Estimated future amortization expense related to finite-lived purchased intangible assets as of December 31, 2016, is as follows.

(in thousands)	
2017	755
2018	615
2019	615
2020	273
	<u>\$2,258</u>

7. Contingent Consideration

In connection with the acquisition of SIT, Intevac agreed to pay up to an aggregate of \$7.0 million in cash to the selling shareholders if certain milestones were achieved over a specified period. Intevac has made payments to the selling shareholders for achievement of the first milestone in 2011, and for achievement of the second and third milestones in 2012. The fourth and final milestone was not achieved on the targeted date outlined in the acquisition agreement and will not be paid. There is no remaining contingent consideration obligation associated with the milestone agreement at December 31, 2016.

In connection with the acquisition of SIT, Intevac also agreed to pay to the selling shareholders in cash a revenue earnout on Intevac's net revenue from commercial sales of certain products over a specified period up to an aggregate of \$9.0 million. Intevac estimated the fair value of this contingent consideration on December 31, 2016 based on probability-based forecasted revenues reflecting Intevac's own assumptions concerning future revenue from such products. As of December 31, 2016, payments made associated with the revenue earnout obligation have not been significant.

The fair value measurement of contingent consideration is based on significant inputs not observable in the market and thus represents a Level 3 measurement. The following table represents the quantitative range of the significant unobservable inputs used in the calculation of fair value of the contingent consideration liability as of December 31, 2016. Significant increases or decreases in any of these inputs even in isolation would result in a significantly lower (higher) fair value measurement.

Quantitative Information about Level 3 Fair Value Measurements at December 31, 2016

	<u>Fair Value</u>	<u>Valuation Technique</u>	<u>Unobservable Input</u> (in thousands, except for percentages)	<u>Range</u> (Weighted Average)
Revenue Earnout	\$759	Discounted cash flow	Weighted-average cost of capital	15.3%
			Probability weighting of achieving revenue forecasts	10.0% - 80.0% (29.6%)

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Any change in fair value of the contingent consideration subsequent to the acquisition date is recognized in operating income within the consolidated statement of operations. The following table represents a reconciliation of the change in the fair value measurement of the contingent consideration liability for fiscal 2016, 2015 and 2014:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
Beginning balance	\$ 890	\$ 1,134	\$ 1,384
Changes in fair value	(100)	(244)	(250)
Cash payments made	(31)	—	—
Ending balance	<u>\$ 759</u>	<u>\$ 890</u>	<u>\$ 1,134</u>

8. Financial Instruments

Cash, Cash Equivalents and Investments

Cash and cash equivalents, short-term investments and long-term investments consist of:

	<u>December 31, 2016</u>			
	<u>Amortized Cost</u>	<u>Unrealized Holding Gains</u>	<u>Unrealized Holding Losses</u>	<u>Fair Value</u>
	(in thousands)			
Cash and cash equivalents:				
Cash	\$ 18,726	\$ —	\$ —	\$ 18,726
Money market funds	8,317	—	—	8,317
Total cash and cash equivalents	<u>\$ 27,043</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 27,043</u>
Short-term investments:				
Commercial paper	\$ 1,992	\$ —	\$ 1	\$ 1,991
Corporate bonds and medium-term notes	8,586	—	6	8,580
Municipal bonds	600	—	—	600
U.S. treasury and agency securities	6,432	—	1	6,431
Total short-term investments	<u>\$ 17,610</u>	<u>\$ —</u>	<u>\$ 8</u>	<u>\$ 17,602</u>
Long-term investments:				
Corporate bonds and medium-term notes	\$ 2,510	\$ —	\$ 11	\$ 2,499
Municipal bonds	500	—	4	496
U.S. treasury and agency securities	597	1	—	598
Total long-term investments	<u>\$ 3,607</u>	<u>\$ 1</u>	<u>\$ 15</u>	<u>\$ 3,593</u>
Total cash, cash equivalents, and investments	<u>\$ 48,260</u>	<u>\$ 1</u>	<u>\$ 23</u>	<u>\$ 48,238</u>

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

	January 2, 2016			
	Amortized Cost	Unrealized Holding Gains	Unrealized Holding Losses	Fair Value
(in thousands)				
Cash and cash equivalents:				
Cash	\$ 6,208	\$ —	\$ —	\$ 6,208
Money market funds	7,538	—	—	7,538
Total cash and cash equivalents	\$ 13,746	\$ —	\$ —	\$13,746
Short-term investments:				
Corporate bonds and medium-term notes	\$ 9,978	\$ —	\$ 7	\$ 9,971
Municipal bonds	4,238	—	—	4,238
U.S. treasury and agency securities	8,999	—	—	8,999
Total short-term investments	\$ 23,215	\$ —	\$ 7	\$23,208
Long-term investments:				
Corporate bonds and medium-term notes	\$ 6,212	\$ —	\$ 23	\$ 6,189
U.S. treasury and agency securities	3,494	—	10	3,484
Total long-term investments	\$ 9,706	\$ —	\$ 33	\$ 9,673
Total cash, cash equivalents, and investments	\$ 46,667	\$ —	\$ 40	\$46,627

The contractual maturities of available-for-sale securities at December 31, 2016 are presented in the following table.

	Amortized Cost	Fair Value
(in thousands)		
Due in one year or less	\$ 25,927	\$25,919
Due after one through two years	3,607	3,593
	<u>\$ 29,534</u>	<u>\$29,512</u>

The following table provides the fair market value of Intevac's investments with unrealized losses that are not deemed to be other-than temporarily impaired as of December 31, 2016.

	December 31, 2016			
	In Loss Position for Less than 12 Months		In Loss Position for Greater than 12 Months	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
(in thousands)				
Commercial paper	\$ 1,494	\$ 1	\$ —	\$ —
Corporate bonds and medium-term notes	9,478	17	—	—
Municipal bonds	1,096	4	—	—
U.S. treasury and agency securities	2,932	1	—	—
	<u>\$15,000</u>	<u>\$ 23</u>	<u>\$ —</u>	<u>\$ —</u>

All prices for the fixed maturity securities including U.S. treasury and agency securities, commercial paper, corporate bonds and municipal bonds are received from independent pricing services utilized by Intevac's outside investment manager. This investment manager performs a review of the pricing methodologies and

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

inputs utilized by the independent pricing services for each asset type priced by the vendor. In addition, on at least an annual basis, the investment manager conducts due diligence visits and interviews with each pricing vendor to verify the inputs utilized for each asset class. The due diligence visits include a review of the procedures performed by each vendor to ensure that pricing evaluations are representative of the price that would be received to sell a security in an orderly transaction. Any pricing where the input is based solely on a broker price is deemed to be a Level 3 price. Intevac uses the pricing data obtained from its outside investment manager as the primary input to make its assessments and determinations as to the ultimate valuation of the above-mentioned securities and has not made, during the periods presented, any material adjustments to such inputs.

The following table represents the fair value hierarchy of Intevac's available-for-sale securities measured at fair value on a recurring basis as of December 31, 2016.

	Fair Value Measurements at December 31, 2016		
	Total	Level 1	Level 2
	(in thousands)		
Recurring fair value measurements:			
Available-for-sale securities			
Money market funds	\$ 8,317	\$ 8,317	\$ —
U.S. treasury and agency securities	7,029	4,097	2,932
Commercial paper	1,991	—	1,991
Corporate bonds and medium-term notes	11,079	—	11,079
Municipal bonds	1,096	—	1,096
Total recurring fair value measurements	<u>\$29,512</u>	<u>\$12,414</u>	<u>\$17,098</u>

Derivatives

The Company uses foreign currency forward contracts to mitigate variability in gains and losses generated from the re-measurement of certain monetary assets and liabilities denominated in foreign currencies and to offset certain operational exposures from the impact of changes in foreign currency exchange rates. These derivatives are carried at fair value with changes recorded in interest income and other, net in the consolidated statements of operations. Changes in the fair value of these derivatives are largely offset by re-measurement of the underlying assets and liabilities. Cash flows from such derivatives are classified as operating activities. The derivatives have maturities of approximately 30 days.

The following table summarizes the Company's outstanding derivative instruments on a gross basis as recorded in its consolidated balance sheets as of December 31, 2016 and January 2, 2016:

Derivative Instrument	Notional Amounts		Derivative Assets				Derivative Liabilities			
	December 31, 2016	January 2, 2016	December 31, 2016		January 2, 2016		December 31, 2016		January 2, 2016	
			Balance Sheet Line	Fair Value	Balance Sheet Line	Fair Value	Balance Sheet Line	Fair Value	Balance Sheet Line	Fair Value
(In thousands)										
Undesignated Hedges:										
Forward Foreign Currency Contracts	\$ 1,146	\$ 924	(a)	\$ —	(a)	\$ 1	(b)	\$ 8	(b)	\$ 4
Total Hedges	<u>\$ 1,146</u>	<u>\$ 924</u>		<u>\$ —</u>		<u>\$ 1</u>		<u>\$ 8</u>		<u>\$ 4</u>

- (a) Prepaid expenses and other current assets
- (b) Other accrued liabilities

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

9. Equity***Stock Repurchase Program***

On November 21, 2013, Intevac's Board of Directors approved a stock repurchase program authorizing up to \$30.0 million in repurchases. Under this authorization, Intevac purchases shares of its common stock under a systematic stock repurchase program and may also make supplemental stock repurchases from time to time, depending on market conditions, stock price and other factors.

On November 12, 2015, Intevac entered into a Share Repurchase Agreement with Northern Right Capital Management, L.P. and certain of its affiliated funds, including on behalf of a managed account (collectively, "NRC"), whereby Intevac repurchased 1,483,171 shares of its common stock (or approximately 6.8% of the outstanding common stock) from NRC in a privately negotiated transaction at a purchase price of \$4.98 per share, for an aggregate purchase price of \$7.4 million. The repurchase was made in conjunction with Intevac's stock repurchase program.

At December 31, 2016, \$1.5 million remains available for future stock repurchases under the repurchase program.

The following table summarizes Intevac's stock repurchases for fiscal 2016, 2015 and 2014:

	2016	2015	2014
	(in thousands, except per share amounts)		
Shares of common stock repurchased	—	3,419	1,185
Cost of stock repurchased	\$ —	\$ 18,503	\$ 8,302
Average price paid per share	\$ —	\$ 5.39	\$ 6.97

Intevac records treasury stock purchases under the cost method using the first-in, first-out (FIFO) method. Upon reissuance of treasury stock, amounts in excess of the acquisition cost are credited to additional paid-in capital. If Intevac reissues treasury stock at an amount below its acquisition cost and additional paid-in capital associated with prior treasury stock transactions is insufficient to cover the difference between the acquisition cost and the reissue price, this difference is recorded against retained earnings.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

10. Income Taxes

The provision for income taxes on loss from continuing operations for fiscal 2016, 2015 and 2014 consists of the following (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal:			
Current	\$—	\$—	\$ (324)
Deferred	—	—	—
	—	—	(324)
State:			
Current	5	6	5
Deferred	—	—	—
	5	6	5
Foreign:			
Current	237	561	81
Deferred	9	(12)	8,666
	246	549	8,747
Total	<u>\$251</u>	<u>\$555</u>	<u>\$8,428</u>

Income (loss) before income taxes for fiscal 2016, 2015 and 2014 consisted of the following (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
U.S	\$(8,703)	\$(9,538)	\$(13,191)
Foreign	1,513	927	(5,826)
	<u>\$(7,190)</u>	<u>\$(8,611)</u>	<u>\$(19,017)</u>
Effective tax rate	<u>(3.5)%</u>	<u>(6.4)%</u>	<u>(44.3)%</u>

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts for income tax purposes. Significant components of deferred tax assets are as follows (in thousands):

	December 31, 2016	January 2, 2016
Deferred tax assets:		
Vacation, warranty and other accruals	\$ 926	\$ 898
Depreciation and amortization	600	814
Intangible amortization	2,060	2,397
Inventory valuation	3,091	3,321
Deferred income	29	750
Equity-based compensation	3,821	3,612
Net operating loss, research and other tax credit carryforwards	54,844	51,186
Other	918	481
	<u>66,289</u>	<u>63,459</u>
Valuation allowance for deferred tax assets	(65,189)	(62,365)
Total deferred tax assets	<u>1,100</u>	<u>1,094</u>
Deferred tax liabilities:		
Purchased technology	(720)	(950)
Unbilled revenue	(377)	(132)
Total deferred tax liabilities	<u>(1,097)</u>	<u>(1,082)</u>
Net deferred tax assets	<u>\$ 3</u>	<u>\$ 12</u>
As reported on the balance sheet:		
Current deferred tax assets	\$ —	\$ 12
Non-current deferred tax assets	3	—
	<u>\$ 3</u>	<u>\$ 12</u>

Intevac accounts for income taxes in accordance with accounting standards for such taxes, which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the financial reporting and tax bases of recorded assets and liabilities. Accounting standards also require that deferred tax assets be reduced by a valuation allowance if it is more likely than not that some portion of or all of the deferred tax asset will not be realized.

Management assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use the existing deferred tax assets. A significant element of objective negative evidence evaluated was the cumulative loss incurred over the three-year periods ended January 3, 2015, December 31, 2013 and December 31, 2012. Such objective evidence limits the ability to consider other subjective evidence such as Intevac's projections for future growth. On the basis of this analysis and the significant negative objective evidence, for fiscal 2014, a valuation allowance of \$9.4 million was added to record only the portion of the Singapore deferred tax asset that more likely than not will be realized. The Company recorded a valuation allowance decrease of \$136,000 for fiscal 2016 and a valuation allowance increase of \$631,000 for fiscal 2015, respectively, for the Singapore deferred tax asset.

In fiscal 2012, a valuation allowance of \$23.4 million was added to record only the portion of the U.S. federal deferred tax asset that more likely than not will be realized. For fiscal 2016, 2015, 2014 and 2013,

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

valuation allowance increases of \$3.3 million, \$1.6 million, \$4.7 million and \$7.2 million, respectively for the U.S. federal deferred tax asset were recorded. A valuation allowance is recorded against the entire state deferred tax asset which consists of state income tax temporary differences and deferred research and other tax credits that are not realizable in the foreseeable future.

The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased, or if objective negative evidence in the form of cumulative losses is no longer present and additional weight may be given to subjective evidence such as our projections for growth.

As of December 31, 2016, our federal, foreign and state net operating loss carryforwards for income tax purposes were approximately \$66.0 million, \$60.3 million and \$63.8 million, respectively. The federal and state net operating loss carryforwards are subject to various limitations under Section 382 of the Internal Revenue Code and applicable state tax laws. If not utilized, the federal net operating loss carryforwards and the state net operating loss carryforwards will begin to expire in 2028. The foreign net operating loss carryforwards do not expire. As of December 31, 2016, our federal and state tax credit carryforwards for income tax purposes were approximately \$13.5 million and \$13.4 million, respectively. If not utilized, the federal tax credit carryforwards will begin to expire in 2019 and the state tax credits carry forward indefinitely.

The difference between the tax provision (benefit) at the statutory federal income tax rate and the tax provision (benefit) for fiscal 2016, 2015 and 2014 was as follows (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Income tax (benefit) at the federal statutory rate	\$(2,517)	\$(3,014)	\$(6,656)
State income taxes, net of federal benefit	5	6	5
Change in valuation allowance:			
U.S.	3,333	1,625	4,733
Foreign	(136)	631	9,394
Effect of foreign operations taxed at various rates	(232)	(140)	1,662
Research tax credits	(1,058)	(931)	(569)
Effect of tax rate changes, permanent differences and adjustments of prior deferrals	1,137	2,114	153
Unrecognized tax benefits	(281)	264	(294)
Total	<u>\$ 251</u>	<u>\$ 555</u>	<u>\$ 8,428</u>

Intevac has not provided for U.S. federal income and foreign withholding taxes on approximately \$14.3 million of undistributed earnings from non-U.S. operations as of December 31, 2016 because Intevac intends to reinvest such earnings indefinitely outside of the United States. If Intevac were to distribute these earnings, foreign tax credits may become available under current law to reduce the resulting U.S. income tax liability. Determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable. Intevac will remit the non-indefinitely reinvested earnings, if any, of Intevac's non-U.S. subsidiaries where excess cash has accumulated and Intevac determines that it is advantageous for business operations, tax or cash reasons.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

The total amount of gross unrecognized tax benefits was \$7.5 million as of December 31, 2016, of which \$73,000 would affect Intevac's effective tax rate if realized. The aggregate changes in the balance of gross unrecognized tax benefits were as follows for fiscal 2016, 2015 and 2014:

	2016	2015	2014
		(in thousands)	
Beginning balance	\$7,173	\$6,578	\$6,482
Additions based on tax positions related to the current year	652	574	57
Additions for tax positions of prior years	—	21	250
Settlements	(281)	—	—
Lapse of statute of limitations	—	—	(211)
Ending balance	<u>\$7,544</u>	<u>\$7,173</u>	<u>\$6,578</u>

The Company does not anticipate any changes in the amount of unrecognized tax benefits in the next twelve months. It is Intevac's policy to include interest and penalties related to unrecognized tax benefits in the provision for income taxes on the consolidated statements of operations. During fiscal 2016, 2015 and 2014, Intevac recognized a net tax expense (benefit) for interest of (\$1,000), \$2,000 and (\$110,000), respectively. As of December 31, 2016 Intevac had \$9,000 of accrued interest related to unrecognized tax benefits, which was classified as a long-term liability in the consolidated balance sheets. Intevac did not accrue any penalties related to these unrecognized tax benefits because Intevac has other tax attributes which would offset any potential taxes due.

Intevac is subject to income taxes in the U.S. federal jurisdiction, and various state and foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. The material jurisdictions where Intevac is subject to potential examination by tax authorities for tax years after 2009 include the U.S. (Federal and California) and Singapore.

The Inland Revenue Authority of Singapore ("IRAS") is currently conducting a review of the fiscal 2009 through 2012 tax returns of the Company's wholly-owned subsidiary, Intevac Asia Pte. Ltd. IRAS has challenged the Company's tax position with respect to certain aspects of the Company's transfer pricing. Under Singapore tax law, the Company must pay all contested taxes and the related interest to have the right to defend its position. As a result, the Company made deposits of \$318,000 for the 2009 tax year in fiscal 2014 and \$1.1 million for the 2010 tax year in fiscal 2015, respectively. In fiscal 2016, IRAS allowed the deduction of a portion of the challenged deductions and the Company received a partial refund of \$517,000 of the contested taxes. Accordingly, the Company derecognized a portion of the tax accrual of approximately \$281,000 by reducing the income tax provision by \$281,000. The contested tax deposits of \$871,000 and \$1.4 million are included in other long-term assets at December 31, 2016 and January 2, 2016, respectively, on the consolidated balance sheets. The ultimate outcome of this examination is subject to uncertainty. The Company's management and its advisors continue to believe that the Company is "more likely than not" to successfully defend that the tax treatment was proper and in accordance with Singapore tax regulations. Based on the information currently available, the Company does not anticipate a significant increase or decrease to its unrecognized tax benefits for this matter within the next twelve months. We believe that adequate amounts have been reserved for any adjustments that may ultimately result from this or other examinations. Presently, there are no other active income tax examinations in the jurisdictions where Intevac operates.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

11. Employee Benefit Plans

Employee Savings and Retirement Plan

In 1991, Intevac established a defined contribution retirement plan with 401(k) plan features. The plan covers all United States employees eighteen years and older. Employees may make contributions by a percentage reduction in their salaries, not to exceed the statutorily prescribed annual limit. Intevac made cash contributions of \$310,000 for fiscal 2016. Intevac did not make any cash contributions for fiscal 2015 and fiscal 2014. Employees may choose among several investment options for their contributions and their share of Intevac's contributions, and they are able to move funds between investment options at any time. Intevac's common stock is not one of the investment options. Administrative expenses relating to the plan are insignificant.

Employee Bonus Plans

Intevac has various employee bonus plans. A profit-sharing plan provides for the distribution of a percentage of pre-tax profits to substantially all of Intevac's employees not eligible for other performance-based incentive plans, up to a maximum percentage of compensation. Other plans award annual cash bonuses to Intevac's executives and key contributors based on the achievement of profitability and other specific performance criteria. Charges to expense under these plans were \$295,000, \$219,000 and \$22,000, respectively for fiscal 2016, 2015 and 2014. In fiscal 2016, 2015 and 2014, the annual bonus for certain participants in the Company's annual incentive plan will be settled with RSUs with one year vesting. Charges for bonuses in the amount of \$490,000, \$324,000 and \$554,000 for fiscal 2016, 2015 and 2014 were reported as stock compensation expense. In February 2016, the annual bonus for certain participants of the 2015 annual incentive plan was settled with RSUs with one year vesting. Thirty-four participants were granted stock awards to receive 266,000 shares of common stock with a weighted-average grant date fair value of \$4.40 per share. In February 2015, the annual bonus for certain participants of the 2014 annual incentive plan was settled with RSUs with one year vesting. Twenty-nine participants were granted stock awards to receive 133,000 shares of common stock with a weighted-average grant date fair value of \$6.85 per share. See Note 2 "Equity-Based Compensation."

12. Commitments and Contingencies

Leases

Intevac leases certain facilities under non-cancelable operating leases that expire at various times up to March 2024 and has options to renew most leases, with rentals to be negotiated. Certain of Intevac's leases contain provisions for rental adjustments. Included in other long-term liabilities on the consolidated balance sheet is \$2.4 million of deferred rent as of December 31, 2016 related to the effective rent on Intevac's long-term lease for Intevac's Santa Clara, California facility. The terms of the Company's lease of its Santa Clara, California facility include a tenant improvement allowance of up to \$1.7 million. Tenant improvement allowances are reimbursements received from the landlord for construction costs and are amortized on a straight-line basis over the lease term as a reduction in rent. The tenant improvement allowances are recorded when the Company has completed its obligations and the tenant improvement allowance is receivable. In addition, Intevac is required to maintain a standby letter of credit for \$1.0 million for this lease. This standby letter of credit is secured with \$1.0 million of restricted cash. The facility leases require Intevac to pay for all normal maintenance costs. Gross rental expense was approximately \$3.8 million, \$4.0 million and \$3.8 million for fiscal 2016, 2015, and 2014, respectively.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

As of December 31, 2016, future minimum lease payments are as follows.

(in thousands)	
2017	\$ 2,824
2018	2,783
2019	2,859
2020	2,790
2021	2,874
Thereafter	6,777
	<u>\$20,907</u>

Guarantees***Officer and Director Indemnifications***

As permitted or required under Delaware law and to the maximum extent allowable under that law, Intevac has certain obligations to indemnify its current and former officers and directors for certain events or occurrences while the officer or director is, or was serving, at Intevac's request in such capacity. These indemnification obligations are valid as long as the director or officer acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The maximum potential amount of future payments Intevac could be required to make under these indemnification obligations is unlimited; however, Intevac has a director and officer insurance policy that mitigates Intevac's exposure and enables Intevac to recover a portion of any future amounts paid. As a result of Intevac's insurance policy coverage, Intevac believes the estimated fair value of these indemnification obligations is not material.

Other Indemnifications

As is customary in Intevac's industry, many of Intevac's contracts provide remedies to certain third parties such as defense, settlement, or payment of judgment for intellectual property claims related to the use of its products. Such indemnification obligations may not be subject to maximum loss clauses. Historically, payments made related to these indemnifications have been immaterial.

Letters of Credit

As of December 31, 2016, we had letters of credit and bank guarantees outstanding totaling \$1.6 million, including the standby letter of credit outstanding under the Santa Clara, California facility lease and various other guarantees with its bank. These letters of credit and bank guarantees are collateralized by \$1.6 million of restricted cash.

Warranty

Intevac provides for the estimated cost of warranty when revenue is recognized. Intevac's warranty is per contract terms and for its hard disk drive, PV and DCP manufacturing systems the warranty typically ranges between 12 and 24 months from customer acceptance. For systems sold through a distributor, Intevac offers a 3 month warranty. The remainder of any warranty period is the responsibility of the distributor. During this warranty period any defective non-consumable parts are replaced and installed at no charge to the customer. The warranty period on consumable parts is limited to their reasonable usable lives. Intevac uses estimated repair or

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

replacement costs along with its historical warranty experience to determine its warranty obligation. Intevac generally provides a twelve month warranty on its Photonics' products. The provision for the estimated future costs of warranty is based upon historical cost and product performance experience. Intevac exercises judgment in determining the underlying estimates.

On the consolidated balance sheets, the short-term portion of the warranty provision is included in other accrued liabilities, while the long-term portion is included in other long-term liabilities. The expense associated with product warranties issued or adjusted is included in cost of net revenues on the consolidated statements of operations.

The following table displays the activity in the warranty provision account for fiscal 2016 and 2015:

	<u>2016</u>	<u>2015</u>
	(in thousands)	
Beginning balance	\$ 982	\$ 1,186
Expenditures incurred under warranties	(488)	(463)
Accruals for product warranties	943	837
Adjustments to previously existing warranty accruals	(430)	(578)
Ending balance	<u>\$ 1,007</u>	<u>\$ 982</u>

Legal Matters

From time to time, Intevac receives notification from third parties, including customers and suppliers, seeking indemnification, litigation support, payment of money or other actions in connection with claims made against them. In addition, from time to time, Intevac receives notification from third parties claiming that Intevac may be or is infringing their intellectual property or other rights. Intevac also is subject to various other legal proceedings and claims, both asserted and unasserted, that arise in the ordinary course of business. Although the outcome of these claims and proceedings cannot be predicted with certainty, Intevac does not believe that any of these other existing proceedings or claims will have a material adverse effect on its consolidated financial condition or results of operations.

13. Segment and Geographic Information

Intevac's two reportable segments are: Thin-film Equipment and Photonics. Intevac's chief operating decision-maker has been identified as the President and CEO, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. Segment information is presented based upon Intevac's management organization structure as of December 31, 2016 and the distinctive nature of each segment. Future changes to this internal financial structure may result in changes to the reportable segments disclosed.

Each reportable segment is separately managed and has separate financial results that are reviewed by Intevac's chief operating decision-maker. Each reportable segment contains closely related products that are unique to the particular segment. Segment operating profit is determined based upon internal performance measures used by the chief operating decision-maker.

Intevac derives the segment results from its internal management reporting system. The accounting policies Intevac uses to derive reportable segment results are substantially the same as those used for external reporting purposes. Management measures the performance of each reportable segment based upon several metrics,

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

including orders, net revenues and operating income. Management uses these results to evaluate the performance of, and to assign resources to, each of the reportable segments. Intevac manages certain operating expenses separately at the corporate level. Intevac allocates certain of these corporate expenses to the segments in an amount equal to 3% of net revenues. Segment operating income excludes interest income/expense and other financial charges and income taxes according to how a particular reportable segment's management is measured. Management does not consider impairment charges, gains and losses on divestitures and sales of intellectual property, and unallocated costs in measuring the performance of the reportable segments.

The Thin-film Equipment segment designs, develops and markets vacuum process equipment solutions for high-volume manufacturing of small substrates with precise thin-film properties, such as for the hard drive, solar cell and DCP industries, as well as other adjacent thin-film markets.

The Photonics segment develops compact, cost-effective, high-sensitivity digital-optical products for the capture and display of low-light images. Intevac provides sensors, cameras and systems for government applications such as night vision and long-range target identification.

Information for each reportable segment for fiscal 2016, 2015 and 2014 is as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
Net Revenues			
Thin-film Equipment	\$45,253	\$39,622	\$25,290
Photonics	<u>34,871</u>	<u>35,538</u>	<u>40,260</u>
Total segment net revenues	<u>\$80,124</u>	<u>\$75,160</u>	<u>\$65,550</u>
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
Operating Profit (Loss)			
Thin-film Equipment	\$(8,309)	\$(9,345)	\$(22,008)
Photonics	<u>5,813</u>	<u>5,206</u>	<u>8,932</u>
Total segment operating profit (loss)	<u>(2,496)</u>	<u>(4,139)</u>	<u>(13,076)</u>
Unallocated costs	<u>(5,067)</u>	<u>(4,599)</u>	<u>(6,278)</u>
Operating loss	<u>(7,563)</u>	<u>(8,738)</u>	<u>(19,354)</u>
Interest income	195	179	179
Other income (expense), net	<u>178</u>	<u>(52)</u>	<u>158</u>
Loss before income taxes	<u>\$(7,190)</u>	<u>\$(8,611)</u>	<u>\$(19,017)</u>
	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
Depreciation and Amortization			
Thin-film Equipment	\$2,710	\$2,443	\$2,379
Photonics	<u>1,736</u>	<u>1,737</u>	<u>1,834</u>
Total segment depreciation and amortization	<u>4,446</u>	<u>4,180</u>	<u>4,213</u>
Unallocated costs	<u>391</u>	<u>417</u>	<u>492</u>
Total consolidated depreciation and amortization	<u>\$4,837</u>	<u>\$4,597</u>	<u>\$4,705</u>

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
Capital Additions			
Thin-film Equipment	\$ 700	\$ 1,433	\$ 2,230
Photonics	2,463	749	1,203
Total segment capital additions	3,163	2,182	3,433
Unallocated	210	935	272
Total consolidated capital additions	<u>\$3,373</u>	<u>\$3,117</u>	<u>\$3,705</u>

	<u>2016</u>	<u>2015</u>
	(in thousands)	
Segment Assets		
Thin-film Equipment	\$ 39,503	\$ 29,528
Photonics	16,071	16,029
Total segment assets	55,574	45,557
Cash and investments	48,238	46,627
Restricted cash	1,602	1,780
Deferred income taxes	3	12
Other current assets	997	1,052
Common property, plant and equipment	1,039	1,218
Other assets	871	1,435
Consolidated total assets	<u>\$ 108,324</u>	<u>\$ 97,681</u>

Geographic revenue information for fiscal 2016, 2015 and 2014 is based on the location of the customer. Revenue from unaffiliated customers by geographic region/country was as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(in thousands)		
United States	\$42,048	\$49,034	\$51,584
Asia (*)	37,143	23,855	9,931
Europe	933	2,271	4,035
Total net revenues	<u>\$80,124</u>	<u>\$75,160</u>	<u>\$65,550</u>

(*) Revenues are attributable to the geographic area in which Intevac's customers are located. Net trade revenues in Asia include shipments to Singapore, China, Japan and Malaysia.

Net property, plant and equipment by geographic region at December 31 2016 and January 2, 2016 was as follows:

	<u>December 31, 2016</u>	<u>January 2, 2016</u>
	(in thousands)	
United States	\$ 11,148	\$ 10,990
Asia	89	931
Net property, plant & equipment	<u>\$ 11,237</u>	<u>\$ 11,921</u>

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

14. Restructuring Charges

During the first quarter of fiscal 2015, Intevac substantially completed implementation of the 2015 cost reduction plan (the “2015 Plan”), which reduced expenses and reduced its workforce by 3 percent. The cost of implementing the 2015 Plan was reported under cost of net revenues and operating expenses in the consolidated statements of operations. Substantially all cash outlays in connection with the 2015 Plan occurred in the first quarter of fiscal 2015. Implementation of the 2015 Plan reduced salary, wages and other employee-related expenses by approximately \$1.4 million on an annual basis.

During the first half of fiscal 2014, Intevac substantially completed implementation of the 2014 cost reduction plan (the “2014 Plan”), which reduced expenses and reduced its workforce by 6 percent. The cost of implementing the 2014 Plan was reported under cost of net revenues and operating expenses in the consolidated statements of operations. Substantially all cash outlays in connection with the 2014 Plan occurred in the first half of fiscal 2014. Implementation of the 2014 Plan reduced salary, wages and other employee-related expenses by approximately \$2.1 million on an annual basis.

As of December 31, 2016, activities related to the 2015 and 2014 Plans were complete.

The changes in restructuring reserves associated with the cost reduction plans for fiscal 2015 and 2014, are as follows.

	Severance and other employee- related costs	
	2015	2014
	(in thousands)	
Balance at the beginning of the year	\$ —	\$ —
Provision for restructuring charges	148	288
Cash payments made	(148)	(288)
Balance at the end of the year	<u>\$ —</u>	<u>\$ —</u>

15. Related Party Transaction

On November 12, 2015, Intevac entered into a Share Repurchase Agreement with Northern Right Capital Management, L.P. and certain of its affiliated funds, including on behalf of a managed account (collectively, “NRC”), whereby Intevac repurchased 1,483,171 shares of its common stock (or approximately 6.8% of the outstanding common stock) from NRC in a privately negotiated transaction at a purchase price of \$4.98 per share, for an aggregate purchase price of \$7.4 million. The repurchase was made in conjunction with Intevac’s stock repurchase program. Matthew Drapkin, a member of Intevac’s Board of Directors, is a principal of NRC and a member of BC Advisors, LLC, which is the general partner of NRC. NRC continues to beneficially own approximately 3.6% of the outstanding shares of Intevac’s common stock subsequent to the transaction.

INTEVAC, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS – (Continued)

16. Selected Quarterly Consolidated Financial Data (Unaudited)

	Three Months Ended			
	Apr. 2, 2016	July 2, 2016	Oct. 1, 2016	Dec. 31, 2016
	(in thousands, except per share data)			
Net sales	\$13,664	\$14,918	\$22,559	\$28,982
Gross profit	3,856	6,127	8,515	11,912
Net income (loss)	(6,305)	(3,490)	(481)	2,835
Basic net income (loss) per share	\$ (0.31)	\$ (0.17)	\$ (0.02)	\$ 0.14
Diluted net income (loss) per share	\$ (0.31)	\$ (0.17)	\$ (0.02)	\$ 0.13

	Three Months Ended			
	Apr. 4, 2015	July 4, 2015	Oct. 3, 2015	Jan. 2, 2016
	(in thousands, except per share data)			
Net sales	\$19,885	\$20,458	\$18,418	\$16,398
Gross profit	6,922	7,806	4,912	6,677
Net income (loss)	(2,893)	12	(3,759)	(2,526)
Basic and diluted net income (loss) per share	\$ (0.12)	\$ —	\$ (0.17)	\$ (0.12)

Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Management's Report on Assessment of Internal Controls Over Financial Reporting

Evaluation of Disclosure Controls and Procedures

Based on Intevac's management's evaluation (with the participation of Intevac's chief executive officer and chief financial officer), as of the end of the period covered by this report, Intevac's chief executive officer and chief financial officer have concluded that Intevac's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")) are effective to ensure that information required to be disclosed by Intevac in reports that Intevac files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and is accumulated and communicated to Intevac's management, including Intevac's chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting for Intevac. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management (with the participation of the chief executive officer and chief financial officer) conducted an evaluation of the effectiveness of Intevac's internal control over financial reporting based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that Intevac's internal control over financial reporting was effective as of December 31, 2016. BPM LLP, an independent registered public accounting firm, has audited the effectiveness of Intevac's internal control over financial reporting and has issued a report on Intevac's internal control over financial reporting, which is included in their report on the following page.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting during our fourth quarter of fiscal 2016 that has materially affected, or is reasonably likely to materially affect, Intevac's internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
Intevac, Inc.

We have audited the internal control over financial reporting of Intevac, Inc. (a Delaware corporation) and its subsidiaries (the “Company”) as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework* (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Assessment of Internal Controls Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Intevac, Inc. and its subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework* (2013 Framework) issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2016 and January 2, 2016, and the related consolidated statements of operations, comprehensive income (loss), stockholders’ equity, and cash flows for each of the two years in the period ended December 31, 2016 and our report dated February 15, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ BPM LLP

San Jose, California
February 15, 2017

Item 9B. Other Information

None.

PART III**Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this item relating to the Company's directors and nominees, disclosure relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, and information regarding Intevac's code of ethics, audit committee and stockholder recommendations for director nominees is included under the captions "Election of Directors," "Nominees," "Business Experience of Nominees for Election as Directors," "Board Meetings and Committees," "Corporate Governance Matters," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Code of Business Conduct and Ethics" in the Company's Proxy Statement for the 2017 Annual Meeting of Stockholders and is incorporated herein by reference. The information required by this item relating to the Company's executive officers and key employees is included under the caption "Executive Officers of the Registrant" under Item 1 in Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this item is included under the caption "Executive Compensation and Related Information" in the Company's Proxy Statement for the 2017 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Securities authorized for issuance under equity compensation plans. The following table summarizes the number of outstanding options granted to employees and directors, as well as the number of securities remaining available for future issuance, under Intevac's equity compensation plans at December 31, 2016.

<u>Plan Category</u>	(a) <u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	(b) <u>Weighted-average exercise price of outstanding options, warrants and rights</u>	(c) <u>Number of securities remaining available for future issuance under equity compensation plans (1)</u>
Equity compensation plans approved by security holders (2)	3,689,819	\$ 7.00	1,377,757
Equity compensation plans not approved by security holders	—	—	—
Total	<u>3,689,819</u>	<u>\$ 7.00</u>	<u>1,377,757</u>

(1) Excludes securities reflected in column (a).

(2) Included in the column (c) amount are 241,597 shares available for future issuance under Intevac's 2003 Employee Stock Purchase Plan.

The other information required by this item is included under the caption "Ownership of Securities" in the Company's Proxy Statement for the 2017 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is included under the captions "Certain Transactions" and "Corporate Governance Matters" in the Company's Proxy Statement for the 2017 Annual Meeting of Stockholders and is incorporated herein by reference.

[Table of Contents](#)

Item 14. Principal Accountant Fees and Services

The information required by this item is included under the caption “Fees Paid To Accountants For Services Rendered During 2016” in the Company’s Proxy Statement for the 2017 Annual Meeting of Stockholders and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statements

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements:

See “Index to Consolidated Financial Statements” in Part II, Item 8 of this Form 10-K.

All other schedules have been omitted since the required information is not present in amounts sufficient to require submission of the schedule or because the information required is included in the consolidated financial statements or notes thereto.

2. Exhibits

Exhibit Number	Description
3.1 (1)	Certificate of Incorporation of the Registrant
3.2 (2)	Bylaws of the Registrant, as amended
10.1+ (4)	The Registrant’s 2004 Equity Incentive Plan, as amended
10.2+ (5)	The Registrant’s 2003 Employee Stock Purchase Plan, as amended
10.3+ (5)	The Registrant’s 2012 Equity Incentive Plan, as amended
10.4+ (6)	Form of Restricted Stock Unit Agreement for 2012 Equity Incentive Plan
10.5+ (6)	Form of Restricted Stock Agreement for 2012 Equity Incentive Plan
10.6+ (6)	Form of Stock Option Agreement for 2012 Equity Incentive Plan
10.7 (7)	Lease dated March 20, 2014 regarding the space located at 3544, 3560, 3570 and 3580 Bassett Street, Santa Clara, California
10.8+ (3)	The Registrant’s 401(k) Profit Sharing Plan
10.9 (8)	Director and Officer Indemnification Agreement
10.10+ (7)	The Registrant’s Executive Incentive Plan
10.11+ (9)	Offer Letter with Wendell Blonigan
10.12+ (9)	Severance Agreement with Wendell Blonigan
10.13 (10)	Agreement, dated as of December 9, 2013, by and among Intevac Inc., Steven R. Becker, Matthew A. Drapkin, Becker Drapkin Management, L.P., Becker Drapkin Partners (QP), L.P., Becker Drapkin Partners, L.P., BD Partners V, L.P. and BC Advisors, LLC
10.14 (11)	Amendment No. 1, dated November 12, 2015, to Agreement, dated as of December 9, 2013, by and among Intevac, Inc., Steven R. Becker, Matthew A. Drapkin, BC Advisors, LLC, Northern Right Capital Management, L.P. (f/k/a Becker Drapkin Management, L.P.), Northern Right Capital (QP), L.P. (f/k/a Becker Drapkin Partners (QP), L.P.), and Becker Drapkin Partners, L.P.

[Table of Contents](#)

Exhibit Number	Description
10.15+ (12)	Executive Transition Plan with Michael Russak dated January 6, 2014
10.16+ (13)	Executive Transition Plan and Agreement with Christopher Smith dated January 27, 2014
10.17+ (14)	Change in Control Agreement with Jay Cho dated December 10, 2013
10.18+ (15)	Offer Letter with James Moniz
10.19+ (15)	Change in Control Agreement with James Moniz dated October 29, 2014
10.20+ (16)	Form of Change in Control Agreement
10.21 (17)	Agreement, dated as of May 11, 2014, by and among Intevac, Inc., J. Daniel Plants, Marc T. Giles, Voce Catalyst Partners LP and Voce Capital Management LLC
10.22 (11)	Share Repurchase Agreement, dated as of November 12, 2015, by and among Intevac, Inc., Northern Right Capital Management, L.P. (f/k/a Becker Drapkin Management, L.P.), and Becker Drapkin Partners SLV, Ltd.
21.1	Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney (see page 82)
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Vice-President, Finance and Administration, Chief Financial Officer, Treasurer and Secretary Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications Pursuant to U.S.C. 1350, adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

- (1) Previously filed as an exhibit to the Company's Report on Form 8-K filed July 23, 2007
- (2) Previously filed as an exhibit to the Company's Report on Form 8-K filed March 15, 2012
- (3) Previously filed as an exhibit to the Registration Statement on Form S-1 (No. 33-97806)
- (4) Previously filed as an exhibit to the Company's Form 10-Q filed May 3, 2011
- (5) Previously filed as an exhibit to the Company's Definitive Proxy Statement filed April 13, 2016.
- (6) Previously filed as an exhibit to the Company's Form 10-Q filed May 1, 2012
- (7) Previously filed as an exhibit to the Company's Form 10-Q filed April 29, 2014
- (8) Previously filed as an exhibit to the Company's Form 10-K filed March 14, 2008
- (9) Previously filed as an exhibit to the Company's Report on Form 8-K filed July 9, 2013
- (10) Previously filed as an exhibit to the Company's Report on Form 8-K filed December 10, 2013
- (11) Previously filed as an exhibit to the Company's Report on Form 8-K filed November 12, 2015
- (12) Previously filed as an exhibit to the Company's Report on Form 8-K filed January 7, 2014

[Table of Contents](#)

- (13) Previously filed as an exhibit to the Company's Report on Form 8-K filed January 31, 2014
- (14) Previously filed as an exhibit to the Company's Form 10-Q filed October 28, 2014
- (15) Previously filed as an exhibit to the Company's Report on Form 8-K filed October 31, 2014
- (16) Previously filed as an exhibit to the Company's Report on Form 8-K filed November 15, 2016
- (17) Previously filed as an exhibit to the Company's Report on Form 8-K filed May 15, 2014
- + Management compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(b) of Form 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 15, 2017.

INTEVAC, INC.

/s/ JAMES MONIZ

James Moniz

Executive Vice President, Finance and Administration Chief
Financial Officer and Treasurer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Wendell T. Blonigan and James Moniz and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ WENDELL T. BLONIGAN</u> (Wendell T. Blonigan)	President, Chief Executive Officer and Director (Principal Executive Officer)	February 15, 2017
<u>/s/ JAMES MONIZ</u> (James Moniz)	Executive Vice President, Finance and Administration, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 15, 2017
<u>/s/ NORMAN H. POND</u> (Norman H. Pond)	Chairman of Board	February 15, 2017
<u>/s/ JAMES D. BENHAM</u> (James D. Benham)	Director	February 15, 2017
<u>/s/ MATTHEW A. DRAPKIN</u> (Matthew A. Drapkin)	Director	February 15, 2017
<u>/s/ DAVID S. DURY</u> (David S. Dury)	Director	February 15, 2017
<u>/s/ MARK T. GILES</u> (Mark T. Giles)	Director	February 15, 2017
<u>/s/ THOMAS M. ROHRS</u> (Thomas M. Rohrs)	Director	February 15, 2017
<u>/s/ JOHN F. SCHAEFER</u> (John F. Schaefer)	Director	February 15, 2017

SUBSIDIARIES OF THE REGISTRANT

1. Intevac Photonics, Inc.
2. Intevac Pacific Group Holdings Ltd. Pte – Singapore
3. Lotus Technologies, Inc. – Santa Clara, California
4. IRPC, Inc. – Santa Clara, California
5. Solar Implant Technologies, Inc. – California
6. Intevac Foreign Sales Corporation – Barbados
7. Intevac Asia Private Limited – Singapore
8. Intevac Malaysia Sdn Bhd – Malaysia
9. Intevac Limited – Hong Kong
10. Intevac (Shenzhen) Co. Ltd. – China
11. IVAC Co. Ltd. – Korea

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-212647, 333-205368, 333-197700, 333-190250, 333-181929, 333-175979, 333-168505, 333-160596, 333-152773, 333-143418, 333-134422, 333-125523, 333-109260, 333-106960, 333-50166 and 333-65421) of Intevac, Inc. of our reports dated February 15, 2017 relating to the consolidated financial statements and internal control over financial reporting which appear in this Annual Report on Form 10-K.

/s/ BPM LLP

San Jose, California

February 15, 2017

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated February 17, 2015, with respect to the consolidated financial statements included in the Annual Report of Intevac, Inc. and subsidiaries on Form 10-K for the year ended January 3, 2015. We hereby consent to the incorporation by reference of said report in the Registration Statements of Intevac, Inc. and subsidiaries on Forms S-8 (File No. 333-212647, effective July 22, 2016; 333-205368, effective June 30, 2015; File No. 333-197700, effective July 29, 2014; File No. 333-190250, effective July 30, 2013; File No. 333-181929, effective June 6, 2012; File No. 333-175979, effective August 2, 2011; File No. 333-168505, effective August 3, 2010; File No. 333-160596, effective July 15, 2009; File No. 333-152773, effective August 5, 2008; File No. 333-143418, effective May 31, 2007; File No. 333-134422, effective May 24, 2006; File No. 333-125523, effective June 6, 2005; File No. 333-109260, effective September 29, 2003; File No. 333-106960, effective July 11, 2003; File No. 333-50166, effective November 17, 2000; and File No. 333-65421, effective October 7, 1998).

/s/ GRANT THORNTON LLP

San Jose, California
February 15, 2017

Certifications

I, Wendell T. Blonigan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Intevac, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2017

/s/ WENDELL T. BLONIGAN

Wendell T. Blonigan
President,
Chief Executive Officer and Director

Certifications

I, James Moniz, certify that:

1. I have reviewed this Annual Report on Form 10-K of Intevac, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 15, 2017

/s/ JAMES MONIZ

James Moniz
Executive Vice President, Finance and Administration
Chief Financial Officer and Treasurer

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Wendell T. Blonigan, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Intevac, Inc. on Form 10-K for the period ended December 31, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Intevac, Inc.

Date: February 15, 2017

/s/ WENDELL T. BLONIGAN

Wendell T. Blonigan
President,
Chief Executive Officer and Director

I, James Moniz, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Intevac, Inc. on Form 10-K for the period ended December 31, 2016 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Intevac, Inc.

Date: February 15, 2017

/s/ JAMES MONIZ

James Moniz
Executive Vice President, Finance and Administration
Chief Financial Officer and Treasurer

A signed original of this written statement required by Section 906 has been provided to Intevac, Inc. and will be retained by Intevac, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.