

**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 28, 2024

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 No. 001-39110

**ONTO INNOVATION INC.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

94-2276314  
(I.R.S. Employer  
Identification Number)

16 Jonspin Road, Wilmington, MA 01887  
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (978) 253-6200

**SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:**

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Common Stock, \$0.001 par value per share	ONTO	New York Stock Exchange (NYSE)

**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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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

The aggregate market value of the registrant's voting Common Stock held by non-affiliates of the registrant was approximately \$10,757,963,994 based on the closing price of the Common Stock on the New York Stock Exchange on June 28, 2024.

The number of shares of the registrant's Common Stock outstanding as of February 3, 2025 was 49,270,256.

**DOCUMENTS INCORPORATED BY REFERENCE**

Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K incorporate by reference information from the definitive proxy statement for the registrant's annual meeting of stockholders scheduled to be held on May 21, 2025.

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## FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K (this “Form 10-K”), or incorporated by reference in this Form 10-K, of Onto Innovation Inc. (referred to in this Form 10-K, together with its consolidated subsidiaries, unless otherwise specified or suggested by the context, as the “Company,” “Onto Innovation,” “we,” “our” or “us”) are “forward-looking statements” or are based on “forward-looking statements,” including, but not limited to, those concerning:

- our business momentum and future growth;
- technology development, product introduction and acceptance of our products and services;
- our manufacturing practices and ability to deliver both products and services consistent with our customers’ demands and expectations and to strengthen our market position, including our ability to source components, materials, and equipment due to supply chain delays or shortages;
- our expectations of the semiconductor market outlook;
- future revenue, gross profits, research and development and engineering expenses, selling, general and administrative expenses, and cash requirements;
- the effects of political, economic, legal, and regulatory changes or conflicts on our global operations;
- the effects of natural disasters or public health emergencies on the global economy and on our customers, suppliers, employees, and business;
- our dependence on certain significant customers and anticipated trends and developments in and management plans for our business and the markets in which we operate; and
- our ability to be successful in managing our cost structure and cash expenditures and results of litigation.

Statements contained or incorporated by reference in this Form 10-K that are not purely historical are forward-looking statements and are subject to safe harbors created under Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as, but not limited to, “anticipate,” “believe,” “continue,” “estimate,” “expect,” “intend,” “plan,” “should,” “may,” “could,” “will,” “would,” “forecast,” “project” and words or phrases of similar meaning, as they relate to our management or us.

Forward-looking statements contained herein reflect our current expectations, assumptions and projections with respect to future events and are subject to certain risks, uncertainties and assumptions, such as those identified in Part I, Item 1A. “Risk Factors” and elsewhere in this Form 10-K. Actual results may differ materially and adversely from those included in such forward-looking statements. Forward-looking statements reflect our position as of the date of this report and we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

## PART I

### Item 1. Business.

#### General

Onto Innovation<sup>®</sup> is a worldwide leader in the design, development, manufacture and support of metrology and inspection tools for the semiconductor industry, including process control tools that perform optical metrology and inspection on patterned and unpatterned wafers, including macro defect inspection of both 2D and 3D wafer features, wafer substrate and panel substrate lithography systems, and process control analytical software. Our products are primarily used by silicon wafer manufacturers, semiconductor integrated circuit (“IC”) fabricators, and advanced packaging manufacturers operating in the semiconductor market. Our products are also used for process control in a number of other specialty device manufacturing markets, including light emitting diodes (“LED”), vertical-cavity surface-emitting lasers (“VCSEL”), micro-electromechanical systems (“MEMS”), CMOS image sensors (“CIS”), silicon and compound semiconductor (SiC and GaN) power devices, analog devices, RF filters, data storage, and certain industrial and scientific applications.

We provide process and yield management solutions used in bare silicon wafer production and wafer processing facilities, often referred to as “front-end” manufacturing, and advanced packaging of chips and test facilities, or “back-end” manufacturing, through a portfolio of standalone systems for optical metrology, macro-defect inspection, packaging lithography, as well as transparent and opaque thin film measurements. Our automated and integrated metrology systems measure critical dimensions, device structures, topography, shape, and various thin film compositions, including three-dimensional features and film thickness, as well as optical and material properties. Our primary areas of focus include products that provide critical yield-enhancing and actionable information, which is used by microelectronic device manufacturers to improve yield and time to market of their next-generation devices. Our systems feature sophisticated software and production-worthy automation. In addition, our advanced process control software portfolio includes powerful solutions for standalone tools, groups of tools, and factory-wide and enterprise-wide suites to enhance productivity and achieve significant cost savings. Our systems are backed by worldwide customer service and applications support.

#### Industry Background

We participate in the sale, design, manufacture, marketing and support of process control systems across all major segments of the semiconductor industry for optical critical dimension (“OCD”) metrology, thin film metrology, silicon wafer inspection, including 2D and 3D macro inspection and lithography tools for advanced packaging and advanced analytical software for semiconductor manufacturing as well as inspection systems for certain industrial applications and scientific research. Our principal market is semiconductor capital equipment. Semiconductors packaged as ICs, or “chips”, are used in consumer electronics, server and enterprise systems, mobile computing (including smart phones and tablets), data storage devices, and embedded automotive and control systems. Our core focus is the measurement and control of the structure, composition, and geometry of semiconductor devices as they are fabricated on silicon wafers to improve device performance and manufacturing yields. Our end customers manufacture many types of ICs for a multitude of applications, each having unique manufacturing challenges. This includes ICs to enable information processing and management (logic ICs), memory storage (NAND, 3D-NAND, and DRAM), analog devices (e.g., Wi-Fi and 5G radio ICs, power devices), MEMS sensor devices (accelerometers, pressure sensors, microphones), CMOS image sensors, and other specialty end markets including components for hard disk drives, LEDs, and power management devices.

#### Markets

**Advanced Nodes.** “Advanced nodes” refers to leading-edge ICs where the sizes of transistors and other features continue to shrink. Advanced nodes are associated with transistor dimensions less than 10 nanometers (nm), with the most advanced logic devices now in production using 3nm and soon 2nm transistor dimensions. Our metrology systems used to measure and characterize these small features are generally purchased when a customer is beginning development at a new, smaller node, in order to set up and test new manufacturing equipment being installed for production at the new node. Our process control/metrology equipment is generally installed prior to the installation of the actual process equipment for that reason. Additional process control equipment is normally purchased when the initial process yields have been stabilized and more manufacturing capacity is required to meet production demands. Therefore, our sales to customers for advanced nodes is generally higher when manufacturing lines for new nodes are being established and may not represent continuous sales revenue until our initial systems reach high levels of utilization driven by the need for greater capacity.

The growth in artificial intelligence (AI) based applications has generated significant demand and new technology requirements in the advanced node segment, including for both logic and memory devices. Demand for our products also continues to be driven by our customers’ desire for higher overall chip performance enabled by a greater number of transistors

per square millimeter, while improving power efficiency, logic processing capability, data storage volume and manufacturing yield. To achieve these goals, our customers have increased their use of more complex materials and processing methods in their manufacturing flow. The primary path for performance gains is geometric scaling, known as node shrinks, or scaling of transistor dimensions. In some cases, our customers are implementing new materials and methods in high volume manufacturing, including materials and device architectures to reduce power consumption. To scale NAND memory, for example, a 3D layered architecture has been implemented for several customers with more than 150 storage cell layers for devices in production. Additional innovation continues in Data Storage, Power Devices, MEMS, and Image Sensors. We believe the use of these new materials and manufacturing methods has increased demand for our products such as the Atlas<sup>®</sup> product line, which is capable of measuring advanced nodes as certain features shrink beyond 7nm, to 5nm, 3nm and in the most advanced of cases, 2 nm or less.

To shrink features, new methods, including multiple patterning lithography and extreme ultra-violet (“EUV”) lithography, have been developed. The EUV process is driving significantly higher requirements for the silicon wafers that are entering the EUV chamber. Small particles on the backside of the wafer measuring a few micrometers (microns) can distort the images being projected onto the top side. Our NovusEdge<sup>®</sup> inspection tool has been installed at major silicon wafer manufacturers to detect backside contamination and edge cracking as a final quality control mechanism before wafers are shipped to the semiconductor fabrication processes. The top side of wafers used for the EUV process is covered with an epitaxial layer, which must also be scanned for any impurities. This compositional analysis may be measured using our Element<sup>®</sup> system using Fourier Transform Infrared (“FTIR”) algorithms.

**Advanced Packaging.** “Advanced packaging” refers to a variety of technologies on either wafer or panel level substrates (or both) that enable the miniaturization of electronic products, such as smartphones, watches, and tablets. Historically, IC packaging refers to the final stage of semiconductor device fabrication, in which a single circuit made from semiconducting material (a die or chip) is encased in a molded package using small wires to provide connections to a carrier that can be soldered to a printed circuit board and also prevents physical damage and corrosion to the chip. Advanced packaging refers loosely to the multi-layer conductors and chip structures (other than wires) that often interconnect multiple die, feed them with electric power and create signal paths to and from the Printed Circuit (“PC”) board, dissipate their heat, and protect them from damage. Today, the drive to pack more functions into a small space and reduce their power requirements demands that chip packages do much more than ever before to combine multiple chips and functions into a single molded package.

One example of the technology used in advanced packaging is the 3D integration of semiconductors. This technology involves stacking individual chips in one integrated package. Through-silicon vias (“TSVs”) are vertical copper interconnects that are embedded from the bottom surface of a die to the top surface and use small copper/solder “bumps” to connect one chip to another. TSVs allow power and communication to be shared among the individually stacked components. This offers the advantages of shorter signal paths and, in turn, reduced power consumption, enhanced bandwidths, integration of heterogeneous components such as memory and logic chips, and smaller surface area. The processes required for 3D integration vary from one manufacturer to another and many continue to be optimized for yield and to ensure the functioning of individual stacked chips.

Heterogeneous integrated (“HI”) packaging is another advanced packaging technology using copper pillars/bumps to vertically connect a wide variety of stacked die for 2.5D, and 3D integration techniques as well as horizontally connected chips and is considered the next disruptive technology for several reasons. First, HI packages using 3D stacking can significantly reduce the space needed inside an electronic device, such as a smartphone, by combining multiple chips/functions into a “system in a package” (“SIP”). Next, HI packages also improve a system’s performance by reducing power and signal conductor lengths, which previously were routed from package to package through a PC board using thin redistribution layers (“RDLs”) to connect chips that are side-by-side. Lastly, the technology is currently considered the preferred vehicle for next generation uses, such as SIP, and package on package formats. As a result of the small overall form factor, HI packages provide the functionality needed in high-end mobile and wearable products.

Our inspection systems and software are used for process control and detection of potential reliability failures in nearly all of these packages. Inspection rates for advanced packages are high throughout the assembly process to avoid a single defective chip from being assembled into a relatively expensive package. Thus, unlike the cyclical nature of our metrology equipment associated with node shrinks, our sales revenue for advanced packaging is generally driven by assembly volumes. Recently, the growth in AI applications has generated significant demand and new technology requirements in the advanced packaging segment at both the wafer process and panel process levels.

**Panel Substrate Manufacturing.** One current process to manufacture advanced packaging involves attaching known good die to a 300mm wafer. SIP packages can often contain side-by-side die, meaning the package can be large and limit the number of packages being placed on a wafer. In order to meet the growing demand at reduced average selling prices, manufacturers are looking to scalable technology. Advanced packaging facilities looking to improve Cost of Ownership and

increase productivity are transitioning from 300mm wafers to large rectangular panels, which can be as large as 650mm x 650mm. This larger size enables companies manufacturing large area packages to increase the number of devices being processed at each step as they are no longer limited to operating within the constraints of a round wafer. By responding to market opportunities and addressing the stringent demands of customers' technical roadmaps, we believe that Onto Innovation is optimally positioned to capitalize on the emerging market of high-volume manufacturing of advanced IC substrates. For example, the JetStep® X500 lithography system, having emerged from the flat panel display market, is readily capable of processing RDLs on very thin advanced organic laminate panels in the semiconductor advanced packaging market. The Firefly® series of panel level macro inspection tools, designed for high resolution inspection, can provide defect detection and location information to the JetStep X500 tool for each die, which greatly improves lithography throughput using our exclusive StepFAST™ process. It also delivers a combination of defect classification and process throughput in a single software platform. It reduces capital investment requirements and provides a reliable pathway to transition from wafer to panel-based processes.

## **Technology**

We believe that our expertise in our core technologies of optics and software and our combined investment in research and development will enable us to rapidly develop new technologies and products in order to quickly respond to emerging industry trends and competitive challenges. The breadth of our technology enables us to offer a diverse combination of metrology, inspection, and process control solutions. Unique features have been designed into our lithography systems to meet our customers' changing process requirements. Our metrology and inspection technologies provide process control for the majority of advanced node wafers processed today in a semiconductor wafer fab. In front-end processes, OCD metrology, thin film metrology, wafer stress metrology and macro defect detection and classification technologies allow yield enhancement for critical processes such as photolithography, diffusion, etch, chemical mechanical planarization ("CMP") and outgoing quality control. Within the back-end manufacturing processes, our 2D/3D advanced macro defect inspection provides our customers with critical quality assurance and process information. Defects may be created during probing, bumping, dicing, assembly processes (RDLs, TSVs, copper pillars, etc.) or general handling and can have a major impact on device and process quality. Lastly, we turn the gathered data into useful knowledge for our customers to make yield-enhancing decisions, which lower their scrap cost and environmental impact and improve their margins.

## **Onto Innovation's Products**

**Automated Metrology Systems.** The Atlas family of products represents our line of high-performance automated metrology systems providing OCD and thin film metrology and wafer stress metrology for transistor and interconnect metrology applications. The thin film and OCD technology is supported by our suite of solutions including our latest introductions of AI Diffract™ software, SpectraProbe™ software and NanoGen™ scalable computing engine, which enables visualization, modeling, and analysis of complex structures.

AI Diffract is a modeling, visualization and analysis software that takes signals from the metrology systems, providing critical dimension, thickness, and optical properties from in-line measurements. The software has an intuitive three-dimensional modeling interface to provide visualization of today's advanced and complex semiconductor devices. There are proprietary fitting algorithms in AI Diffract that enable very accurate and very fast calculations for signal processing for high fidelity model-based measurements. SpectraProbe is a model-less fitting engine that enables fast time to solution for in-line excursion detection and control. SpectraProbe complements the high-fidelity modeling of AI Diffract with a simple machine learning interface for rapid recipe deployment. The software is supported by NanoGen, an enterprise scale computing hardware system that is deployed to run the computing intensive analysis software. NanoGen leverages commercial server chips and networking architecture and is optimized to support the workload of AI Diffract and SpectraProbe analysis.

**Integrated Metrology Systems.** Our integrated metrology ("IM") systems are installed directly onto wafer processing equipment to provide near real-time measurements for improved process control and maximum throughput. Our IM systems are sold directly to end user customers. The IMPULSE® family of products includes the latest technology for OCD, and thin film metrology, and has been successfully qualified on multiple independent wafer fabrication equipment suppliers' platforms.

**Silicon Wafer All-surface Inspection/Characterization.** "All-surface" refers to inspection of the wafer frontside, edge, and backside as well as wafer's locator notch. The edge inspection process focuses on the area near the wafer edge, an area that poses difficulty for traditional wafer frontside inspection technology due to its varied topography and process variation. Edge bevel inspection looks for defects on the side edge of a wafer. Edge bead removal and edge exclusion metrology involve a topside surface measurement required exclusively in the lithography process, primarily to determine if wafers have been properly aligned for the edge exclusion region. The primary reason for wafer backside inspection is to determine if contamination has been created that may spread throughout the wafer fab. For instance, it is critical that the wafer backside be free of defects prior to the EUV lithography process to prevent focus and exposure problems on the wafer frontside.

Our materials characterization products include systems that are used to monitor the physical, optical, and material characteristics of discrete electronic industry, opto-electronic, HB-LED (high brightness LEDs), solar PV (solar photovoltaics), compound semiconductor, strained silicon and silicon-on-insulator (“SOI”) devices, including composition, crystal structure, layer thickness, dopant concentration, contamination and electron mobility.

We have a broad portfolio of products for materials characterization including photoluminescence mapping and Fourier Transform Infrared (“FTIR”) spectroscopy in automated and manual systems for substrate quality and epitaxial thickness metrology. The NanoSpec<sup>®</sup> line supports thin film measurement across all applications in both low volume production and research applications.

**Macro Defect Inspection.** Chip manufacturers deploy advanced macro defect inspection throughout the production line to monitor key process steps, gather process-enhancing information and ultimately, lower manufacturing costs. Field-established tools such as the F30<sup>™</sup>, NSX<sup>®</sup>, Firefly<sup>®</sup>, and the latest Dragonfly<sup>®</sup> G3 inspection systems are found in the wafer fab (front-end) and packaging (back-end) facilities around the world. These high-speed tools incorporate features such as wafer-less recipe creation, tool-to-tool correlation and multiple inspection resolutions. Using Discover<sup>®</sup> yield management software, the vast amounts of data gathered through automated inspection can be analyzed and classified to determine trends and locate root causes that directly affect yield.

**Automated Defect Classification and Pattern Analysis.** Automating the defect detection and classification process is best done by a system that can mimic, or even extend, the response of the human eye, but at a much higher speed, with higher resolution and more consistency. To do this, our systems capture full-color whole wafer images using simultaneous dark and bright field illumination. The resulting bright and dark field images are compared to those from an “ideal” wafer having no defects using our Automated Defect Classification (“ADC”) software. When a difference is detected, its image is broken down into mathematical vectors that allow rapid and accurate comparison with a library of known classified defects stored in the tool’s database. Patented and proprietary enhancements of this approach enable very fast and highly repeatable image classification. The system is pre-programmed with an extensive library of local, global, and color defects and can also store a virtually unlimited amount of new defect classes. This allows customers to define defects based on their existing defect classification system, provides more reliable automated rework decisions and enables more accurate statistical process control data. Reviewing defects using ADC enables automated inspection systems to maintain their utilization for high throughput inspection. Using defect image files captured by automated inspection systems, operators are able to view high-resolution defect images to determine defects that cause catastrophic failure of a device, known as killer defects. Combining the review process with classifying defects enables faster analysis by grouping defects found together as one larger defect, a scratch for example, and defects of similar types across a wafer lot to be grouped based on size, repeating defects, and other user-defined specifications.

**Yield Analysis.** Using wafer maps, charts and graphs, the massive amounts of data gathered through automated inspection can be analyzed to determine trends across bumps, die, wafers and lots. This analysis may determine where a process variation or deviation has occurred, allowing process engineers to make corrections or enhancements to increase yields. Defect data analysis is performed to identify, analyze and locate the source of defects and other manufacturing process excursions. Using either a single wafer map or a composite map created from multiple wafer maps, this analysis enables identification of defect patterns and distribution. When combined with inspection data from inspection points placed strategically, this analysis may pinpoint the source of the defects so corrective action can be taken.

**Opaque Film Metrology.** The MetaPULSE<sup>®</sup> and Echo<sup>™</sup> systems allow customers to simultaneously measure the thickness and other properties of up to six metal or non-metallic opaque film layers without physically contacting product wafers. PULSE<sup>™</sup> technology uses an ultra-fast laser to generate acoustic waves that pass down through a stack of opaque films such as those used in copper or aluminum interconnect processes, as well as the hard mask layer in 3D-NAND chips, sending back to the surface a reflected signal (echo) that indicates film thickness, density, and other process critical parameters. We believe we are a leader in providing systems that can measure opaque thin-film stacks non-destructively with the speed and accuracy semiconductor device manufacturers demand in order to achieve high yields with the latest fabrication processes. The technology is ideal for characterizing copper interconnect structures. The MetaPULSE and Echo systems, used for fast and accurate measurements of metal interconnect in front-end wafer fabs, have now been chosen by back-end manufacturers to perform system measurements in new process applications such as RF filters and modules, driven by the need for on-product metrology as feature sizes decrease and pattern densities increase.

**Industrial, Scientific, and Research Markets — 4D Technology<sup>®</sup>.** The 4D business offers a line of interferometry systems for the measurement and inspection of high precision surfaces. End markets include high precision optics surfaces and components, aerospace and defense components, and unique research and scientific instrumentation that requires the unique high-speed results of the 4D systems.

**Advanced Packaging Lithography.** Our lithography steppers use projection optics to expose circuit patterns from a mask or reticle onto a substrate to expose images with optimal fidelity. These systems employ a bright light that is transmitted through a mask or reticle containing display circuit patterns. Substrates are aligned on the system and the mask is imaged through a projection lens onto photoresist material coated on the substrate. The substrate is then moved, or “stepped,” to a second position to expose an adjacent area. The system repeats the step and exposure process until the entire substrate is patterned. Once the exposure process has been completed, the substrate is developed with an alkali solution to reveal the underlying material. The imaged photoresist serves as a stencil barrier that allows for the processing of the underlying metal or insulating layers. The substrates then continue through the etching, stripping and deposition processes until multi-layer circuits are completed.

In order to deal with increased input/output (“I/O”) resulting from devices with enhanced functionality, increased power distribution efficiency, and higher frequency, IDMs and outsourced semiconductor assembly and test (“OSATs”) facilities must incorporate lithography capabilities to create RDLs for their advanced packaging technologies. However, the associated substrates and processes are significantly different than those used in front-end wafer processing. For advanced packaging, the lithography system must perform in a completely different application, with significantly different operating parameters. For example, most packaging is an additive process, while wafer processing is subtractive, and thick films, rather than thin films, are used to enable the creation of features. In order for equipment to effectively function in this environment, it must overcome these challenges. Our JetStep® systems have been specifically designed to meet these challenges head on. The new JetStep X500 System is designed for rectangular substrates (panels), which when combined with user-selectable wavelength options, maximizes throughput while not limiting resolution when needed. High-fidelity optics are able to image the fine features required while at the same time achieving superior depth of field to minimize non-flatness that is typical for advanced packaging applications. On-the-fly auto focus and an innovative reticle management system improve yield and utilization. These features result in a revolutionary lithography system specifically designed to meet advanced packaging challenges.

**Process Control Software.** We provide a wide range of advanced process control solutions, which are designed to improve factory profitability, including run-to-run control, fault detection, classification and tool automation. We are a leading provider of process control software in the semiconductor industry. Advanced process control (“APC”) employs software to automatically detect or predict tool failure (fault detection) as well as calculate recipe settings for a process that will drive the yielded output to meet and exceed the target, despite variations in the incoming material and minor instabilities within the process equipment. Process control software enables the factory to increase capacity and yield while decreasing rework and scrap. It enables reduced production costs by lowering consumables, process engineering time and manufacturing cycle time.

**Yield Management Software.** Semiconductor manufacturers use yield management software (“YMS”) to obtain valuable process yield and equipment productivity information. The data necessary to generate productivity information comes from many different sources throughout the wafer fab: inspection and metrology systems, tool sensors, tool recipes, electrical tests and the fab environment. As the complexity and cost of manufacturing processes increase, the value of faster, better analysis to support critical manufacturing decisions grows. As a result, customers are demanding robust yield management systems that can analyze large, complex data sets quickly and effectively. Our fully integrated YMS is designed to analyze data from disparate sources and multiple sites to maximize productivity across the entire value chain.

## Customers

Over 240 customers purchased Onto Innovation tools or software in 2024. We support a diverse customer base in terms of both geographic location and type of device manufactured. Our customers are located in over 24 countries. The following table shows the revenue concentration at our top customers for the respective fiscal years:

<u>Customer</u>	<u>Year Ended</u>		
	<u>December 28,</u> <u>2024</u>	<u>December 30,</u> <u>2023</u>	<u>December 31,</u> <u>2022</u>
Customer A	*	*	*
Customer B	*	*	*
Customer C	*	^	*

\* Total customer revenue was 10% or more of total revenue.

^ Total customer revenue was less than 10% of total revenue.

## **Sales, Customer Service and Application Support**

We believe that the capability for direct sales and support is beneficial for developing and maintaining close customer relationships and for rapidly responding to changing customer requirements. We provide local direct sales, service and application support through our worldwide offices located in the United States, South Korea, Japan, Taiwan, China, Vietnam Singapore and Europe, and work with selected dealers and sales representatives on a more limited basis in various countries. Our applications team is composed of technically experienced sales engineers who are knowledgeable in the use of metrology systems generally and the unique features and advantages of our specific products. Supported by our technical applications team, our sales and support teams work closely with our customers to offer cost-effective solutions to complex measurement and process problems.

We believe that customer service and technical support for our systems are crucial factors that distinguish us from our competitors and are essential to building and maintaining close, long-term relationships with our customers. We generally provide a warranty for our products that ranges from twelve to fourteen months to cover defects in material and workmanship. We provide system support to our customers through factory technical support and globally deployed field service personnel. The factory technical support operations provide customers with telephonic technical support access, direct training programs, operating manuals and other technical support information to enable effective use of our metrology and measurement instruments and systems. We have field service operations based in various locations throughout the United States, South Korea, Taiwan, China, Japan, Vietnam, Malaysia, Singapore, Israel, and Europe.

## **Competition**

The global semiconductor equipment industry is intensely competitive and we have multiple established and potential competitors in the markets in which we participate. Our industry is driven by rapid technological adoption cycles, with new entrants from overseas and domestic sources competing for our customers' business. Our ability to compete effectively depends upon our ability to continuously improve our existing products, applications and services, and our ability to develop new products, applications and services that meet constantly evolving customer requirements. In order to continuously improve and develop new products and maintain customer service and support centers worldwide, we believe that we will require significant resources; however, some of our competitors may have greater financial, research, engineering, manufacturing and marketing resources than we have.

In automated systems for the semiconductor industry, our principal competitors are KLA Corporation ("KLA") and Nova Ltd. (formerly Nova Measuring Instruments Ltd.) ("Nova") for thin film and critical dimension OCD metrology. Our principal competitors for advanced packaging inspection are KLA and Camtek Ltd. ("Camtek"). While the advanced packaging lithography market is served by various competitors, our primary competitors are Ushio, Inc. ("Ushio") and Canon, Inc. ("Canon"). Our primary competitor for inspection in the panel market is GigaVis Co. Ltd. The primary competitor for our software products is PDF Solutions, Inc. ("PDF Solutions") and our primary competitor for integrated metrology systems for the semiconductor industry is Nova. The optoelectronics, discrete device and industrial and scientific markets are addressed primarily by our material characterization and 4D systems, served by numerous competitors, of which no single competitor or group of competitors has established a majority position.

We believe that our competitive position in each of our markets is based on the ability of our products and services to address customer requirements related to numerous competitive factors. Competitive selections are based on many factors involving technological innovation, productivity, total cost of ownership of the system, including impact on end of line yield, price, product performance and throughput capability, quality, reliability and customer support.

## **Manufacturing**

Our manufacturing operations are in: Milpitas, California; Tucson, Arizona; Wilmington, Massachusetts; Bloomington, Minnesota; and at various contract manufacturers around the world. It is our strategy to outsource the assemblies that do not contain elements that we believe lead to a direct competitive advantage. Most of our automated and integrated products are currently manufactured at our Milpitas and Bloomington facilities. We currently do not expect our manufacturing operations to require additional major investments in capital equipment in the near term.

We manufacture key modular assemblies and integrated tools and make reasonable efforts to ensure that externally purchased parts or raw materials are available from multiple suppliers, if possible. Certain components, subassemblies and services necessary for the manufacture of our systems are obtained either from a sole supplier or limited group of suppliers. We also have long-term supply agreements with strategic suppliers for the supply of key assemblies for use in our products. For more information, please see "Part I, Item IA - Risk Factors - If we do not manage our supply chain effectively, our operating results may be adversely affected, and any increases in material, labor, supplier, logistics and other operating costs, or supply chain delays and shortages, could lower our margins or result in lost sales".

## Research and Development

We continue to invest in research and development to provide our customers with products that add value to their manufacturing processes and that provide a better and differentiated solution than our competitors so that our products stay in the forefront of current and future market demands. Whether it is for an advancement of current technology, yield and manufacturing improvement, enabling new end device technology, or the development of a new application in our core or emerging markets, we are committed to product excellence and longevity.

The markets for equipment and systems for manufacturing semiconductor devices and for performing OCD metrology, macro-defect inspection, advanced packaging lithography and thin film transparent and opaque process control metrology are characterized by continuous technological development and product innovations. We believe that the rapid and ongoing development of new products and enhancements to existing products are critical to our success. Accordingly, we devote a significant portion of our technical, management and financial resources to research and development programs.

## Intellectual Property

We believe that our success will depend to a great degree upon innovation, technological expertise and our ability to adapt our products to new technology. As a result, we have a policy of seeking patents on inventions governing new products or technologies as part of our ongoing research, development, and manufacturing activities. As of December 28, 2024, we have been granted, or hold exclusive licenses to, 408 U.S. and foreign patents. The patents we own, jointly own or exclusively license have expiration dates ranging from 2025 to 2043. We also have 240 pending patent applications in the United States and other countries. Our patents and patent applications principally cover various aspects of metrology, macro-defect detection and classification, altered material characterization, lithography techniques, automation, artificial intelligence, and machine learning.

To protect our intellectual property, we rely on a combination of patents, copyrights, trademarks, trade secret laws, contractual provisions and licenses and non-disclosure agreements. There can be no assurance that our intellectual property will provide us competitive advantage or that we will be able to fully protect our intellectual property. For more information, please see “Part I, Item IA - We may fail to adequately protect our intellectual property and, therefore, lose our competitive advantage.” Additionally, others may obtain patents or trademarks and assert them against us. We may find it necessary to engage in litigation regarding intellectual property rights or contractual rights, which will be costly and time consuming without guarantee that it will yield the result we seek. For more information, please see “Part I, Item IA - Protection of our intellectual property rights, or the efforts of third parties to enforce their own intellectual property rights against us, may result in costly and time-consuming litigation, substantial damages, lost product sales and/or the loss of important intellectual property rights.”

## Human Capital and Talent

As of December 28, 2024, we had approximately 1,551 staff globally, 370 in research and development, 266 in operations, 209 in administration and 706 in sales, applications and service support. A large percentage of our employees have technical backgrounds and undergraduate and/or advanced degrees. Many of our employees have specialized skills and experience that are of value to our business, products and services. Our future success will depend, in large part, upon our ability to attract, motivate and retain our highly skilled, technical, operational and managerial team members, who are in great demand in our industry and business communities.

Approximately 56% of our employees are located in the United States, 39% in Asia Pacific and 5% in Europe. None of our employees are represented by a union and we have never experienced a work stoppage because of union actions. We consider our employee relations to be favorable.

**Purpose and Culture.** All of our employees are expected to uphold the following core values which are foundational to our culture:

- Passion – ownership, pride and caring in our work
- Integrity – honesty, dependability, ethicality and accountability
- Collaboration – working together toward a common goal
- Results – meeting and exceeding goals, focusing on innovation and growth

These core values define the way we do business in our everyday actions and choices. We strive to create a respectful work environment characterized by mutual trust and the absence of intimidation, oppression, discrimination and exploitation.

**Talent Development and Acquisition.** Successful execution of our strategy is dependent on attracting, developing and retaining key employees and members of our management and leadership teams. The skills, experience and industry knowledge of our employees significantly benefit our operations and performance. We continuously evaluate, modify, and enhance our internal processes, tools and technologies to increase employee engagement, productivity, quality and efficiency. We offer employees access to internal and external training and development courses to support individual development. We review succession plans and focus on promoting internal talent to help grow our employees, both professionally and personally.

We strive to promote and cultivate an inclusive and diverse culture that welcomes and celebrates everyone without bias. In addition, we look to actively engage within our communities to foster and attain social equity.

**Compensation Philosophy.** Our compensation philosophy creates the framework and building blocks for our rewards and recognition programs. We have a pay-for-performance culture that ties compensation to the performance of the individual and the Company. We provide balanced compensation programs that focus on the following five key elements:

- Pay-for-performance - Reward those who achieve or exceed set goals and objectives, while also recognizing those making significant, impactful contributions;
- External market based - Pay levels that are competitive with respect to the labor market in which we compete for talent;
- Internal equity - Providing fair compensation programs within the Company;
- Fiscal responsibility - Providing programs which can be responsibly supported by our operations; and
- Legal compliance - Ensure compliance with the applicable laws of the states and countries in which we operate in all material respects.

**Safety, Health and Wellness.** We strive to provide an environment which is safe and where our employees can be productive. We have rigorous health and safety programs focused on awareness, recognition, risk assessment and management, as well as teamwork.

Our benefit plans are competitive and comprehensive. We provide each of our employees educational programs and initiatives focused on holistic wellness supporting nutritional, physical, emotional, mental and financial wellbeing.

## **Corporate Social Responsibility**

Our stakeholders are essential to our business – shareholders, customers, suppliers, employees, communities as well as the environment and society. We are working to make our workforce more inclusive, our business more sustainable, and our communities more engaged by maintaining strong sustainability practices. Actions we have taken in pursuit of these commitments include the following environmental and social programs:

- Demanded excellence in our environmental performance.
- Demanded excellence in our quality performance, as demonstrated through our product and process qualification commitments, including ISO 9001 Quality Management;
- Set goals to reduce our environmental impact, including an increase in our use of renewable energy, a decrease in hazardous waste landfill, an increase in recycling materials and beneficial reuse, and a reduction in our freshwater usage;
- Committed to Responsible Business Alliance (RBA) Code of Conduct and humane treatment of all at Onto Innovation both upstream and downstream. We have established policies and practices to ensure that: working conditions are safe; workers are treated with respect and dignity; and manufacturing processes are environmentally responsible.
- Produced systems responsibly by offering tool trade-in, refurbishment and technology upgrade programs;
- Provided corporate matching for employee donations to qualified nonprofit organizations; and
- Engaged in community service projects in our communities globally.

## **Compliance with Governmental Regulations**

We are subject to international, federal, state and local regulations that are customary to businesses in the semiconductor capital equipment manufacturing industry. Such regulations include, but are not limited to:

- The Restriction of Hazardous Substances Directive (“RoHS”), which restricts the use of certain hazardous substances in electrical and electronic equipment;
- General Data Protection Regulation (“GDPR”), which provides guidelines for the collection and processing of personal information from individuals who live in the European Union, and similar laws and regulations in other jurisdictions in which we operate;
- The U.S. Foreign Corrupt Practices Act (“FCPA”), which prohibits companies and their individual officers from influencing foreign officials with any personal payments or rewards;
- Conflict minerals reporting, which imposes disclosure requirements regarding the use of “conflict” minerals mined from the Democratic Republic of Congo and adjoining countries in products; and
- Export regulations.

Our compliance with export regulations has negatively impacted our ability to compete for the business of domestic customers in China, which has adversely affected our results of operations. For additional discussion of the impact of trade policies and export regulations on our competitive position, see “Part I, Item IA - Risk Factors - Tariffs, export regulations, and other market barriers have impacted and may continue to impact our ability to compete for the business of domestic customers in China and other jurisdictions, and our results of operations.” We expect that the new U.S. presidential administration will seek to implement a regulatory reform agenda that is significantly different than that of the prior administration, which may impact agency rulemaking and enforcement priorities, which could, in turn, have a material effect on our business.

## **Available Information**

Our Internet website address is <http://www.ontoinnovation.com>. The information on our website is not incorporated into this Form 10-K. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K (and any amendments to those reports) are made available free of charge, on or through our Internet website, as soon as reasonably practicable after such material is electronically filed with or furnished to the United States Securities and Exchange Commission (the “SEC”). All filings we make with the SEC are also available free of charge via EDGAR through the SEC’s website at <http://www.sec.gov>. These filings may also be obtained through the SEC’s website. Documents that are not available through the SEC’s website may also be obtained by submitting an online request to the SEC at <http://www.sec.gov>.

We also make available, free of charge, through our investor relations website at <https://investors.ontoinnovation.com>, our corporate governance guidelines, Code of Business Conduct and Ethics, charters of the committees of our Board of Directors, and other information and materials, including information about how to contact our Board of Directors.

Investors and others should also note that we announce material financial information to our investors using our investor relations website, SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media to communicate with the public about the Company, our products and services and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in the Company to review the information we post on the social media channels listed on our investor relations website.

## **Item 1A. Risk Factors.**

Below is a summary of the principal factors and uncertainties that make investing in our company risky. You should read this summary together with the more detailed description of each risk factor contained further below.

### *Risks Related to Our Operations*

- If we do not manage our supply chain effectively, our operating results may be adversely affected, and any increases in material, labor, supplier, logistics and other operating costs, or supply chain delays and shortages, could lower our margins or result in lost sales.
- Variations in the amount of time it takes for us to sell our systems may cause fluctuations in our operating results, which could cause our stock price to decline.
- We are subject to order and shipment uncertainties. Our profitability will decline if we fail to accurately forecast customer demand when managing inventory.
- If we deliver systems with defects, our credibility will be harmed, and the sales and market acceptance of our systems will decrease.
- Our integrated metrology systems are integrated with systems sold independently by wafer fabrication equipment suppliers, and a decrease in sales by these suppliers, or the development of competing systems by these suppliers, could harm our business.
- We must attract and retain experienced senior executives and other key personnel with knowledge of semiconductor device manufacturing and inspection, metrology or lithography equipment and related software to help support our future growth, and competition for such personnel in our industry is high.
- Any prolonged disruption in the operations of our manufacturing facilities could have a material adverse effect on our revenue.
- We outsource select manufacturing activities to third-party service providers, which decreases our control over the performance of these functions, may result in lower quality and functionality of our products, and exposes us to additional supply chain risks.
- Our ability to fulfill our backlog may have an effect on our long-term ability to procure contracts and fulfill current contracts.
- We are implementing a new enterprise resource planning system. Our failure to implement it successfully, on time and on budget could have a material adverse effect on us.

### *Risks Related to Our Customers*

- Our largest customers account for a substantial portion of our revenue, and our revenue and cash flows could decline considerably if one or more of these customers were to purchase significantly fewer of our systems or delay or cancel a large order.

### *Risks Related to Product Development*

- If we are not successful in developing new and enhanced products for the semiconductor device manufacturing industry, we will lose sales and market share to our competitors.
- If new products developed by us do not gain general market acceptance, we will be unable to generate revenue and recover our investments, which may result in a write down of inventory.
- Even if we are able to develop new products that gain market acceptance, sales of these new products could impair our ability to sell existing products.
- If our relationships with our large customers deteriorate, our product development activities could be adversely affected.

### *Risks Related to Intellectual Property and Data Security*

- We may fail to adequately protect our intellectual property and, therefore, lose our competitive advantage.

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- Protection of our intellectual property rights, or the efforts of third parties to enforce their own intellectual property rights against us, may result in costly and time-consuming litigation, substantial damages, lost product sales and/or the loss of important intellectual property rights.
- If our network security measures are breached and unauthorized access is obtained to a customer's data, to our data, or to our information technology systems, we may incur significant legal and financial exposure and liabilities and may experience disruptions in our operations.
- Compliance with data protection laws may be costly and may impede development of new products, and any failure to comply with, or inquiries under, these laws could have a material adverse effect on our business, results of operations and financial condition.

*Risks Related to Competition*

- Some of our current and potential competitors have significantly greater resources than we do, and increased competition could impair sales of our products or cause us to reduce our prices.
- Because of the high cost of switching equipment vendors in our markets, it is sometimes difficult for us to win new customers from our competitors even if our systems are superior to theirs.

*Risks Related to Our International Operations*

- Tariffs, export regulations, and other market barriers have impacted and may continue to impact our ability to compete for the business of domestic customers in China and other jurisdictions which has adversely affected and may continue to adversely affect our, business, financial condition and results of operations.
- We are subject to compliance with domestic and foreign laws and regulations, and the burden of complying with such laws and regulations, or any failure to comply, has adversely affected and may continue to adversely affect our business, financial condition and results of operations.
- Political and economic instability may result in reduced demand for our products.
- Natural disasters, changes in climate, public health crises, and geo-political conflicts could materially adversely affect our worldwide operations (or those of our business partners).
- We may face difficulties in staffing and managing foreign branch operations due to political tensions or cultural differences.
- Currency fluctuations may impact our international sales or expose us to exchange rate risk.
- Our internal controls with respect to anti-corruption laws may not be effective, and any failure to comply with such laws may result in severe sanctions and liabilities, which may negatively affect our business, operating results and financial condition.

*Risks Related to Laws, Legal Proceedings, Financial Markets and the Environment*

- Changes in tax rates or tax liabilities could affect results.
- Turmoil or fluctuations in the credit markets and the financial services industry may negatively impact our business, results of operations, financial condition or liquidity, and our factoring arrangements may expose us to additional risks.
- We are subject to various environmental laws and regulations that could impose substantial costs upon us, and failure to comply with such laws and regulations may harm our business, operating results and financial condition.
- Legal proceedings, claims and investigations may expose us to increased costs and may negatively affect our business and results of operations.

*Risks Related to Growth and Acquisitions*

- We may choose to acquire new and complementary businesses, products or technologies instead of developing them ourselves, and we may be unable to complete these acquisitions or may not be able to successfully integrate an acquired business in a cost-effective and non-disruptive manner.

If we cannot effectively manage growth, our business may suffer.

*Risks Related to the Global Economy and the Semiconductor Industry*

- Cyclicalities in the semiconductor device industry has led to substantial decreases in demand for our systems in the past and may, from time to time, continue to do so.
- Our future rate of growth is highly dependent on the development and growth of the market for microelectronic device inspection, lithography and metrology equipment.

*General Risk Factors*

- Provisions of our charter documents and of Delaware law could discourage potential acquisition proposals and/or delay, deter or prevent a change in control of our company.
- Our stock price is volatile.

**Risks Related to Our Operations**

**If we do not manage our supply chain effectively, our operating results may be adversely affected, and any increases in material, labor, supplier, logistics and other operating costs, or supply chain delays and shortages, could lower our margins or result in lost sales.**

We need to continually evaluate our global supply chains and assess opportunities to reduce costs. We must also enhance quality, speed and flexibility to meet changing demand for our products and product mix and uncertain market conditions. Our success also depends in part on refining our cost structure and supply chains so that we have flexibility and can maintain and improve profitability. Deterioration in the tariff environment such as discussed herein under the heading “Tariffs, export regulations, and other market barriers have impacted and may continue to impact our ability to compete for the business of domestic customers in China and other jurisdictions, which has adversely affected and may continue to adversely affect our, business, financial condition and results of operations,” political instability or changes in suppliers may cause our costs to increase and, if we are not able to offset the increased costs by charging higher sales prices, will cause a decline in our margins. To improve margins on our products, we would need to negotiate price reductions with our vendors. But we cannot be certain that we will be able to do so in a timely manner, or at all. Failure to achieve the desired level of cost reductions could adversely affect our financial results. Despite our efforts to control costs and increase efficiency in our facilities, changes in demand could still cause us to realize lower operating margins and profitability.

Further, our gross margins and financial performance may be adversely affected by increases in our operating costs, such as material, labor, supplier costs, logistics and energy costs, all of which have been and may continue to be subject to inflationary pressures. Operating costs have increased and may continue to increase further as a result of supply chain disruptions in connection with the sourcing of components, materials, equipment, engineering support, and services, labor shortages, high inflation rates, and cost increases attributable to the effects of geopolitical events, such as the Russia-Ukraine conflict. In addition, we source components for certain of our tools from a supplier in Israel. If the conflict in Israel and Gaza and the surrounding area escalates, it could disrupt our supply chain, resulting in a material adverse impact on our business.

These risks may be heightened because we obtain some of the components and subassemblies included in our systems from a limited group of suppliers and do not have long-term contracts with many of our suppliers. Our dependence on limited-source suppliers of components and our lack of long-term contracts with certain of our suppliers expose us to several risks, including a potential inability to obtain an adequate supply of components, price increases, late deliveries and poor component quality. A significant number of our suppliers are the sole source or single source for certain components or subassemblies. If such a supplier is unable or unwilling to manufacture and deliver components to us on the time schedule and of the quality or quantity that we require, we may be forced to seek to engage an additional or replacement supplier or redesign our product to use alternative components, which could result in additional expenses and delays in product development or shipment of product to our customers. Disruption or termination of the supply of components has delayed and could in the future delay shipments of some of our systems. Such delays may damage our customer relationships and reduce our sales. The lead time required for shipments of some of our components can be greater than six months. In addition, the lead time required to qualify new suppliers for lasers and certain optics could be as long as a year, and the lead time required to qualify new suppliers of other components could be as long as nine months. In some cases, we may need to purchase components in advance of receiving customer orders for product. If we are unable to accurately predict our component needs, or if our component supply is disrupted, we may miss market opportunities by not being able to meet the demand for our systems. Further, a significant increase in the price of one or more of these components or subassemblies could seriously harm our results of operations and cash flows.

Our efforts to mitigate any cost increases, labor impacts and supply chain delays and shortages may not be successful, and we cannot predict the duration of these current trends or other future increases in operating costs. We may not be able to pass cost increases through to our customers fully (or at all), and if supply chain delays and shortages delay delivery of our products, our customers may seek to purchase from our competitors. Any such occurrence may have a material adverse impact on our gross margins and business, financial position, results of operations and cash flows.

**Variations in the amount of time it takes for us to sell our systems may cause fluctuations in our operating results, which could cause our stock price to decline.**

Variations in the length of our sales cycles could cause our revenue and cash flows, and consequently, our business, financial condition, operating results and cash flows to fluctuate widely from period to period. This variation could cause our stock price to decline. Our customers generally take a long time to evaluate our inspection and/or film metrology systems and many people are involved in the evaluation process. We expend significant resources educating and providing information to our prospective customers regarding the uses and benefits of our systems in the semiconductor fabrication process. The length of time it takes for us to make a sale depends upon many factors, including, but not limited to:

- the efforts of our sales force;
- the complexity of the customer's fabrication processes;
- the internal technical capabilities and sophistication of the customer;
- the customer's budgetary constraints; and
- the quality and sophistication of the customer's current metrology, inspection or lithography equipment.

Because of the number of factors influencing the sales process, the period between our initial contact with a customer and the time when we recognize revenue from that customer and receive payment, if ever, varies widely in length. Our sales cycles, including the time it takes for us to build a product to customer specifications after receiving an order to the time we recognize revenue, typically range from three to twenty-four months. Sometimes our sales cycles can be much longer, particularly with customers in Asia. During these cycles, we commit substantial resources to our sales efforts in advance of receiving any revenue, and we may never receive any revenue from a customer despite our sales efforts. If we do make a sale, our customers often purchase only one of our systems, the performance of which they then evaluate for a lengthy period before purchasing any more of our systems. The number of additional products a customer purchases, if any, depends on many factors, including the customer's capacity requirements. The period between a customer's initial purchase and any subsequent purchases can vary from three months to a year or longer, and variations in the length of this period could cause further fluctuations in our operating results and, possibly, in our stock price.

**We are subject to order and shipment uncertainties. Our profitability will decline if we fail to accurately forecast customer demand when managing inventory.**

We typically plan production and inventory levels based on internal forecasts of customer demand, which can be highly unpredictable and can fluctuate substantially, which could lead to excess inventory write-downs and result in negative impacts on gross margin and net income. We have limited visibility into our customers' inventories, future customer demand and the product mix that our customers will require, which could adversely affect our production forecasts and operating margins. In addition, innovation in our industry could render significant portions of our inventory obsolete. If we overestimate our customers' requirements, we may have excess inventory, which could lead to obsolete inventory and unexpected costs. Conversely, if we underestimate our customers' requirements, or if we experience sustained disruptions to our supply chain or shipping delays, we may have inadequate inventory, which could lead to foregone revenue opportunities, loss of potential market share and damage to customer relationships as product deliveries may not be made on a timely basis, disrupting our customers' production schedules. In response to anticipated long lead times to obtain inventory and materials from outside suppliers and foundries, we periodically order materials in advance of customer demand. This advance ordering has in the past and may in the future result in excess inventory levels or unanticipated inventory write-downs if expected orders fail to materialize, or other factors make our products less saleable. In addition, any significant future cancellation or deferral of product orders could adversely affect our revenue and margins, increase inventory write-downs due to obsolete inventory, and adversely affect our operating results and stock price.

Our earnings could be negatively affected, and our inventory levels could materially increase, if we are unable to predict our inventory needs in an accurate and timely manner and adjust our orders for parts and subcomponents in the event that our needs increase or decrease materially due to unexpected increases or decreases in demand for our products. Any material increase in our inventories could result in an adverse effect on our financial position, while any material decrease in our ability

to procure needed inventories could result in an inability to supply customer demand for our products, thus adversely affecting our revenue.

**If we deliver systems with defects, our credibility will be harmed, and the sales and market acceptance of our systems will decrease.**

Our systems are complex and have occasionally contained errors, defects and bugs when introduced. Defects may be created during probing, bumping, dicing or general handling, and can have a major impact on device and process quality. When this occurs, our credibility and the market acceptance and sales of our systems could be harmed. Further, if our systems contain errors, defects or bugs, computer viruses or malicious code as a result of cyber-attacks to our computer networks, we may be required to expend significant capital and resources to alleviate these problems. Defects could also lead to product liability as a result of product liability lawsuits against us or against our customers. We have agreed to indemnify our customers under certain circumstances against liability arising from defects in our systems provided that we also include a cap on our liability in the related sales agreements. Our product liability insurance policy currently provides both aggregate coverage as well as an overall umbrella coverage. In the event of a successful product liability claim, we could be obligated to pay damages significantly in excess of our product liability insurance limits.

**Our integrated metrology systems are integrated with systems sold independently by wafer fabrication equipment suppliers, and a decrease in sales by these suppliers, or the development of competing systems by these suppliers, could harm our business.**

We believe that sales of integrated metrology systems will continue to be an important source of our net revenues. Sales of our integrated metrology systems depend upon the ability of a small number of wafer fabrication equipment suppliers to sell semiconductor manufacturing equipment products that are compatible with our metrology systems as components. If these suppliers are unable to sell such products, if they choose to focus their attention on products that do not integrate with our systems, or if they choose to develop competing systems, our business could suffer.

**We must attract and retain experienced senior executives and other key personnel with knowledge of semiconductor device manufacturing and inspection, metrology or lithography equipment and related software to help support our future growth, and competition for such personnel in our industry is high.**

Our success depends, to a significant degree, upon the continued contributions of our key executive management, engineering, sales and marketing, customer support, finance and manufacturing personnel. The loss of any of these key personnel, each of whom would be extremely difficult to replace, through resignations, retirement or other circumstances, could harm our business and operating results. Despite our employment and noncompetition agreements with key members of our senior management team, these individuals or other key employees may still leave us, which could have a material adverse effect on our business. We do not have key person life insurance on any of our executives. In addition, to support our future growth, we will need to attract and retain additional qualified employees. Competition for such personnel in our industry is intense, and we may not be successful in attracting and retaining qualified employees.

The expansion of high technology companies worldwide and growth in the demand for semiconductors have increased demand and competition for qualified personnel. Competition for engineering and other technical personnel in some of the markets in which we operate is especially intense due to continued increases in the number of technology companies worldwide. In order to attract and retain executives and other key employees, we must provide a competitive compensation package, including cash and share-based compensation. If the anticipated value of our share-based incentive awards does not materialize so that they cease to be viewed as valuable, if our profits decrease, or if our total compensation package is not viewed as competitive, our ability to attract, retain and motivate executives and key employees could be weakened.

**Any prolonged disruption in the operations of our manufacturing facilities could have a material adverse effect on our revenue.**

We produce the majority of our systems in our manufacturing facilities in the following locations: Wilmington, Massachusetts; Milpitas, California; Tucson, Arizona; and Bloomington, Minnesota. We also use contract manufacturers in China, Japan and the United States. Our manufacturing processes are highly complex and require sophisticated and costly equipment and a specially designed facility. As a result, any prolonged disruption in the operations of our manufacturing facilities could seriously harm our ability to satisfy our customer order deadlines. Restrictions on our access to or operation of manufacturing facilities or on our support operations or workforce, or similar limitations for our vendors and suppliers, may impact our ability to meet customer demand and could have a material adverse effect on our financial condition and results of operations. If we cannot timely deliver our systems, our results from operations and cash flows could be materially and adversely affected.

**We outsource select manufacturing activities to third-party service providers, which decreases our control over the performance of these functions, may result in lower quality and functionality of our products, and exposes us to additional supply chain risks.**

We outsource select product manufacturing to third-party service providers. Outsourcing reduces our control over the performance of the outsourced functions. Dependence on outsourcing may also adversely affect our ability to bring new products to market. If we do not effectively manage our outsourcing strategy or if third-party service providers do not perform as anticipated, we may experience operational difficulties, increased costs, manufacturing interruptions or inefficiencies in the operation of our supply chain, any or all of which could delay our delivery of products to our customers, and materially and adversely affect our business, financial condition, and results of operations.

Our third-party service providers could also be, and certain of our service providers have been, subject to cybersecurity incidents or other events that negatively impact their operations and their ability to perform services for us in a timely manner or at all. Such disruptions could impact our ability to manufacture products in a timely manner or force us to work with another service provider at a higher cost. Any such event could materially and adversely affect our business, financial condition, and results of operations. In addition, some of our third-party party services providers also have product designs, know-how, data files and other important confidential information regarding our products. If a third-party service provider experiences a cybersecurity event in which such confidential information is publicly exposed or shared with bad actors, it could materially and adversely impact our competitive position in the market.

**Our ability to fulfill our backlog may have an effect on our long-term ability to procure contracts and fulfill current contracts.**

Our ability to fulfill our backlog may be limited by our ability to devote sufficient financial and human capital resources and may be limited by available material supplies and our suppliers' own supply chain issues. If we do not fulfill our backlog in a timely manner, we may experience delays in product delivery, which would postpone receipt of revenue from those delayed deliveries. Delayed fulfillment also increases the risk that a customer may change or cancel an order due to evolution of the customer's technological, production or market needs, which would result in a loss of revenue. Additionally, if we are consistently unable to fulfill our backlog, this may be a disincentive to customers to award large contracts to us in the future until they are comfortable that we can effectively manage our backlog.

**We are implementing a new enterprise resource planning system. Our failure to implement it successfully, on time and on budget could have a material adverse effect on us.**

We are in the process of completing a multi-year implementation of a complex new enterprise resource planning ("ERP") system. ERP implementations are complex, time-consuming, labor intensive, and involve substantial expenditures on system software and implementation activities. The ERP system is critical to our ability to provide important information to our management, obtain and deliver products, provide services and customer support, send invoices and track payments, fulfill contractual obligations, accurately maintain books and records, provide accurate, timely and reliable reports on our financial and operating results, and otherwise operate our business. ERP implementations also require transformation of business and financial processes in order to reap the benefits of the ERP system. Any such implementation involves risks inherent in the conversion to a new computer system, including loss of information and potential disruption to our normal operations. The implementation and maintenance of the new ERP system has required, and will continue to require, the investment of significant financial and human resources and the implementation may be subject to delays and cost overruns. In addition, we may not be able to successfully complete the implementation of the new ERP system without experiencing difficulties. Any disruptions, delays or deficiencies in the design and implementation or the ongoing maintenance of the new ERP system could adversely affect our ability to process orders, ship products, provide services and customer support, send invoices and track payments, fulfill contractual obligations, accurately maintain books and records, provide accurate, timely and reliable reports on our financial and operating results, including reports required by the SEC such as the evaluation of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, and otherwise operate our business. Additionally, if we do not effectively implement the ERP system as planned or the system does not operate as intended, the effectiveness of our internal control over financial reporting could be adversely affected or our ability to assess it adequately could be delayed.

## Risks Related to Our Customers

**Our largest customers account for a substantial portion of our revenue, and our revenue and cash flows could decline considerably if one or more of these customers were to purchase significantly fewer of our systems or delay or cancel a large order.**

Sales to end user customers that individually represent at least ten percent of our revenue typically account for, in the aggregate, a considerable amount of our revenue. We operate in the highly concentrated, capital-intensive semiconductor device manufacturing industry. Historically, a substantial portion of our revenue in each quarter and year has been derived from sales to relatively few customers, and this trend is expected to continue. If any of our key customers were to purchase significantly fewer of our systems in the future, or if they delay or cancel a large order, our revenue and cash flows could meaningfully decline. We expect that we will continue to depend on a small number of large customers for a sizable portion of our revenue. In addition, as large semiconductor device manufacturers seek to establish closer relationships with their suppliers, we expect that our customer base will become even more concentrated.

## Risks Related to Product Development

**If we are not successful in developing new and enhanced products for the semiconductor device manufacturing industry, we will lose sales and market share to our competitors.**

We operate in an industry that is highly competitive and subject to evolving industry standards, rapid technological changes, rapid changes in consumer demands and the rapid introduction of new, higher performance systems with shorter product life cycles. To be competitive in our demanding market, we must continually design, develop and introduce in a timely manner new lithography, inspection and metrology process control systems that meet the performance and price demands of semiconductor device manufacturers. We must also continue to refine our current systems so that they remain competitive. We expect to continue to make significant investments in our research and development activities and at times may make inventory investments prior to commercialization. We may experience difficulties or delays in our development efforts with respect to new systems, and we may not ultimately be successful in our product enhancement efforts to improve and advance products or in responding effectively to technological change, as not all research and development activities result in viable commercial products. In addition, we cannot provide assurance that we will be able to develop new products for the most opportunistic new markets and applications. Any significant delay in releasing new systems could cause our products to become obsolete, adversely affect our reputation, give a competitor a first-to-market advantage or cause a competitor to achieve greater market share. Our competitors may also develop products, including through the use of artificial intelligence, that may have performance advantages over systems we currently offer or may offer in the future, which could similarly weaken our competitive position.

Further, customers that may otherwise desire to purchase our products from us and purchase other products from our competitors may nevertheless purchase competing products from our competitors rather than purchase our products due to a variety of reasons, including to gain favorable or volume pricing from our competitors.

**If new products developed by us do not gain general market acceptance, we will be unable to generate revenue and recover our investments, which may result in a write down of inventory.**

Inspection, lithography and metrology product development is inherently risky because it is difficult to foresee developments in semiconductor device manufacturing technology, coordinate technical personnel, and identify and eliminate system design flaws. Further, our products are leading edge and complex, and often the applications to our customers' businesses are unique. Any new systems we introduce may not achieve or sustain a significant degree of market acceptance and sales.

We expect to spend a significant amount of time and resources developing new systems and refining our existing systems. In light of the long product development cycles inherent in our industry, these expenditures will be made well in advance of the prospect of deriving revenue from the sale of those systems. The long lead times for some components may also require us to place orders for components and accumulate inventory in advance of market acceptance of our products.

Our ability to commercially introduce and successfully market new systems is subject to a wide variety of challenges during the development cycle, including start-up bugs, design defects, and other matters that could delay introduction of these systems. Since our customers are not obligated by long-term contracts to purchase our systems, our anticipated product orders may not materialize, or orders that are placed may be canceled.

If we do not achieve market acceptance of new products, we may be unable to generate sufficient revenue and cash flow to recover our research and development costs and may experience a write down of our investments in inventory. As a result, our market share, revenue, operating results or stock price could be negatively impacted.

**Even if we are able to develop new products that gain market acceptance, sales of these new products could impair our ability to sell existing products.**

Competition from our new systems could have a negative effect on sales of our existing systems and the prices that we could charge for these systems. We may also divert sales and marketing resources from our current systems in order to successfully launch and promote our new or next generation systems. This diversion of resources could have a further negative effect on sales of our current systems and the value of inventory.

**If our relationships with our large customers deteriorate, our product development activities could be adversely affected.**

The success of our product development efforts depends on our ability to anticipate market trends and the price, performance and functionality requirements of semiconductor device manufacturers. In order to anticipate these trends and ensure that critical development projects proceed in a coordinated manner, we must continue to collaborate closely with our largest customers. Our relationships with these and other customers provide us with access to valuable information regarding trends in the semiconductor device industry, which enables us to better plan our product development activities. If our current relationships with our large customers are impaired, or if we are unable to develop similar collaborative relationships with important customers in the future, our product development activities could be adversely affected.

**Risks Related to Intellectual Property and Data Security**

**We may fail to adequately protect our intellectual property and, therefore, lose our competitive advantage.**

Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology for our principal product families. If we fail to adequately protect our intellectual property, it will give our competitors a significant advantage. We own or have licensed a number of patents relating to our metrology, lithography, wafer and defect inspection systems, as well as artificial intelligence and machine learning systems, and software, including both embedded and application software, and have filed applications for additional patents. Any of our pending patent applications may be rejected, however, and we may be unable to develop additional proprietary technology that is patentable in the future. In addition, the patents that we do own or that have been issued or licensed to us may not provide us with competitive advantages and/or may be invalidated, rendered unenforceable and/or challenged by third parties. Third parties may also design around our patents or copy our patented inventions without our knowledge.

In addition to patent protection, we rely upon copyrights for protection of our proprietary software and documentation, trademarks for protection of our brand and source of goods, and trade secret law and confidentiality and non-compete agreements for protection of our confidential and proprietary information and technology. These measures do not guarantee protection of our intellectual property, however. We can give no assurance that our copyrights will be upheld or will successfully deter infringement by third parties. There can be no assurances that our confidentiality agreements with employees and other third parties will be sufficient to protect our trade secrets and proprietary information or that such information will not be disclosed, that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets, or that we can fully protect our trade secrets and proprietary information. Violations by others of our confidentiality agreements and the loss of employees who have specialized knowledge and expertise could harm our competitive position and cause our sales and operating results to decline as a result of increased competition. It is also possible that third parties will misappropriate our trade secrets or other confidential information. We may be subject to cybersecurity breaches in which a third party obtains our confidential information. Third parties may also reverse engineer our products to copy our technology. Failure to protect our trademarks can lead to other companies selling products using confusing similar names, thereby damaging our brand. In some countries, it can be difficult to register trademarks because of the strict examination process or blocking trademarks for other goods. Costly and time-consuming litigation might be necessary to enforce and determine the scope of our intellectual property rights, and failure to obtain or maintain trade secret protection might adversely affect our ability to continue our research or bring products to market. Any of these circumstances could result in harm to our competitive position in the market.

Monitoring and preventing unauthorized use are also difficult and the measures we take to protect our intellectual property rights may not be adequate. There is a risk that we may be unable to adequately protect our intellectual property rights in certain foreign countries. For example, our competitors may independently develop similar technology or duplicate our products. If

this occurs, it could be easier for our competitors to develop and sell competing products in these countries. Accordingly, infringement of our intellectual property rights poses a serious risk to our ability to conduct business.

**Protection of our intellectual property rights, or the efforts of third parties to enforce their own intellectual property rights against us, may result in costly and time-consuming litigation, substantial damages, lost product sales and/or the loss of important intellectual property rights.**

From time to time, we may be required to initiate litigation in order to enforce our intellectual property rights or to determine the noninfringement, scope or validity of a third party's intellectual property rights. Any litigation, regardless of outcome, could be expensive and time consuming and could subject us to significant liabilities or require us to re-engineer our products or obtain expensive licenses from third parties. There can be no assurance that any patents, copyrights or other intellectual property rights issued to or licensed by us will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide us with a competitive advantage. Furthermore, there is no assurance that any litigation we are involved in will yield the result that we seek as (i) the lawsuit may be dismissed or there could be an adverse finding, (ii) we may not be able to pursue the lawsuit due to the laws of the applicable country or (iii) there may be a subsequent unfavorable change in law that limits our ability to pursue the lawsuit. For example, litigation discovery practice in China, Japan, South Korea, continental Europe and Taiwan is not as robust as in the United States, so it can be more difficult to determine if a company is infringing on our patents and more challenging to bring a lawsuit.

In addition, our commercial success depends in part on our ability to avoid infringing or misappropriating patents or other intellectual property rights owned by third parties. From time to time, we receive communications from third parties asserting that our products or systems infringe, or may infringe, on the intellectual property rights of these third parties. These claims of infringement may lead to protracted and costly litigation, which could require us to pay substantial damages or have the sale of our products or systems stopped by an injunction. Infringement claims could also cause product or system delays or require us to redesign our products or systems, and these delays could result in the loss of substantial revenue. We may also be required to obtain a license from the third party or cease activities utilizing the third party's intellectual property rights. We may not be able to enter into such a license or such a license may not be available on commercially reasonable terms. Accordingly, the loss of an intellectual property dispute could hinder our ability to sell our products or systems or make the sale of our products or systems more expensive, which could lead to reduced revenue or lower margins, respectively.

**If our network security measures are breached and unauthorized access is obtained to a customer's data, to our data, or to our information technology systems, we may incur significant legal and financial exposure and liabilities and may experience disruptions in our operations.**

As part of our business, we store our data and certain data about our customers, vendors and employees in our information technology system. We also rely on our information technology system for business operations. If there is a breach as a result of third-party action, including through the use of artificial intelligence, employee error, malfeasance, break-ins or otherwise, of our security measures designed to protect this information and prevent data loss and other security breaches, and someone obtains unauthorized access to our customers', vendors' or employees' data or disrupts our access to our own data and systems, we could face loss of business, regulatory investigations or court orders or damage to our reputation, and we could be required to expend significant capital and other resources to alleviate the problem, as well as incur significant costs and liabilities, including due to litigation, indemnity obligations, damages for contract breach, penalties for violation of applicable laws or regulations, and costs for remediation and other incentives offered to customers.

Cyber-attacks and other malicious internet-based activities continue to increase. As the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, our ability to anticipate these techniques or to implement adequate preventative measures is reduced. In addition, third parties have made attempts to fraudulently induce employees or users to disclose information to gain access to our data or our customers' data. As a result of any of these events, our or our customers' and vendors' information could be accessed or disclosed improperly. In addition, cybersecurity incidents affecting our customers could result in substantial delays in our ability to ship to those customers or install our products, which could result in delays in revenue recognition or the cancellation of orders. As discussed herein under the heading "We outsource select manufacturing activities to third-party service providers, which decreases our control over the performance of these functions and may result in lower quality and functionality of our products," cybersecurity incidents affecting our service providers could negatively impact our ability to timely and cost-effectively produce products and/or negatively impact our competitive position in the market. Likewise, cybersecurity events impacting our suppliers could result in substantial delays in our ability to obtain necessary components for our products from those suppliers, which could hamper our ability to ship our products to our customers, harming our results of operations and our customer relationships. Any or all of the above issues could negatively affect our ability to attract new customers, cause

existing customers to choose to purchase from our competitors, result in reputational damage or subject us to third-party lawsuits, regulatory fines or other action or liability, which could adversely affect our operating results.

**Compliance with data protection laws may be costly and may impede development of new products, and any failure to comply with, or inquiries under, these laws could have a material adverse effect on our business, results of operations, and financial condition.**

The General Data Protection Regulation (“GDPR”) is a regulation in European Union (“EU”) law on data protection and privacy for the individuals within the EU and the European Economic Area (“EEA”). It also addresses the export of personal data outside the EU and EEA areas. The United Kingdom has adopted legislation that substantially implements the GDPR and provides for a similar penalty structure. We are also subject to the California Consumer Privacy Act of 2018 (“CCPA”) and the California Privacy Rights Act (“CPRA”), an amendment and expansion of the CCPA. We may also be subject to other data privacy laws in the United States and the other countries in which we operate. In many cases, these laws apply not only to third-party transactions, but also to transfers of information between us and our subsidiaries, and among the subsidiaries and other parties with which we have commercial relations. The introduction of new products or expansion of our activities in certain jurisdictions may subject us to additional laws and regulations. These U.S. federal and state and foreign laws and regulations, including GDPR which can be enforced by private parties or government entities, are constantly evolving and can be subject to significant change. In addition, the application and interpretation of these laws and regulations, including GDPR, are often uncertain, particularly in our evolving industry, and may be interpreted and applied differently from country to country. Appropriate technical and organizational measures are necessary to implement these data protection principles. These laws and regulations can be costly to comply with and may delay or impede the development of new products, result in negative publicity, increase our operating costs, require significant management time and attention, or subject us to inquiries or investigations, claims or other remedies, including fines, which may be significant, or demands that we modify or cease existing business practices. A failure by us, our suppliers, or other parties with whom we do business to comply with posted privacy policies or with other federal, state, or international privacy-related or data protection laws and regulations, including GDPR, CCPA, CPRA and other new or changing privacy laws and regulations, could result in proceedings against us by governmental entities or others, which could have a material adverse effect on our business, results of operations, and financial condition.

**Risks Related to Competition**

**Some of our current and potential competitors have significantly greater resources than we do, and increased competition could impair sales of our products or cause us to reduce our prices.**

The market for semiconductor capital equipment is highly competitive. We face substantial competition from established companies in each of the markets we serve. We principally compete with KLA, Nova, Camtek, Ushio, Canon, GigaVis Co. Ltd. and PDF Solutions. Each of our products also competes with products that use different metrology, inspection or lithography techniques. Some of our competitors have greater financial, engineering, manufacturing and marketing resources, broader product offerings and service capabilities and larger installed customer bases than we do. As a result, these competitors may be able to respond more quickly to new or emerging technologies or market developments by devoting greater resources to the development, promotion and sale of products, which, in turn, could impair sales of our products. Further, there may be significant merger and acquisition activity among our competitors and potential competitors, which, in turn, may provide them with a competitive advantage over us by enabling them to rapidly expand their product offerings and service capabilities to meet a broader range of customer needs.

Many of our existing and potential customers in the semiconductor device manufacturing industry are large companies that require global support and service for their semiconductor capital equipment. Some of our competitors have more extensive support and service infrastructures than we do, which could place us at a disadvantage when competing for the business of global semiconductor device manufacturers. Many of our competitors are investing heavily in the development of new systems that will compete directly with our systems. We have, from time to time, selectively reduced prices on our systems in order to protect our market share, and competitive pressures may necessitate further price reductions. We expect our competitors in each product area to continue to improve the design and performance of their products and to introduce new products with competitive prices and performance characteristics. These product introductions would likely require us to decrease the prices of our systems and increase the level of discounts that we grant our customers. Price reductions or lost sales as a result of these competitive pressures would reduce our total revenue and could adversely impact our financial results.

**Because of the high cost of switching equipment vendors in our markets, it is sometimes difficult for us to win new customers from our competitors even if our systems are superior to theirs.**

We believe that once a semiconductor device manufacturer has selected one vendor's capital equipment for a production-line application, the manufacturer generally relies upon that capital equipment and, to the extent possible, subsequent generations of the same vendor's equipment for the life of the application. Once a vendor's equipment has been installed in a production line application, a semiconductor device manufacturer must often make substantial technical modifications and may experience production-line downtime in order to switch to another vendor's equipment. Accordingly, unless our systems offer performance or cost advantages that outweigh a customer's expense of switching to our systems, it will be difficult for us to achieve significant sales to that manufacturer once it has selected another vendor's capital equipment for an application.

**Risks Related to Our International Operations**

**Tariffs, export regulations, and other market barriers have impacted and may continue to impact our ability to compete for the business of domestic customers in China and other jurisdictions, which has adversely affected and may continue to adversely affect our, business, financial condition and results of operations.**

The semiconductor device industry is a high-visibility industry in many of the European and Asian countries in which we sell our products. Because the governments of these countries have provided extensive financial support to our semiconductor device manufacturing customers in these countries, we believe that our customers could be disproportionately affected by any trade embargoes, excise taxes, tariffs, trade retaliation, or other restrictions imposed by their governments on trade with U.S. companies such as ourselves, particularly with respect to the ongoing tensions between the United States and China.

Additionally, over the last several years, the U.S. government has significantly expanded export controls on certain technologies and commodities to certain markets, particularly with respect to semiconductor and other high technology exports to China. For example, the U.S. Department of Commerce ("DoC") has imposed export controls on the transfer of certain U.S. products and technologies to "military end users" in China, as well as restrictions on the transfer of U.S. products to certain companies, including Huawei Technologies Co., Ltd., and its affiliates. Most recently, in 2022, the DoC imposed new export controls related to the Chinese semiconductor manufacturing, advanced computing, and supercomputer industries. In 2022, the DoC also added a number of companies in China to the Unverified List and Entity List of the Export Administration Regulations ("EAR"), including Yangtze Memory Technologies Co., Ltd (YMTC). In October 2023, as well as 2024 and early 2025, the DoC revised and expanded the 2022 export controls.

The effect of these changes, among others, is that Onto Innovation is required to conduct additional end-use diligence and in some instances obtain export licenses before providing products to certain customers. There can be no assurance that export licenses applied for by us or our customers will be granted in a timely manner or at all. We have experienced and may continue to experience a temporary loss of revenues while we are obtaining licenses with certain customers affected by export controls. Failure to obtain any required license could result in a reduction of anticipated revenues until we are able to replace unlicensed orders with other customer orders for which a license has been obtained or is not required, and there can be no assurance that replacement orders will be obtained on favorable terms, in a timely manner, or at all. In addition, any licenses that are granted to us or to our customers may have a short duration or require us to satisfy various conditions, and it is possible that licenses that have been granted may be revoked or we may not be successful in obtaining reissuance of such licenses upon their expiration or in the event modifications are required to a previously issued license. Any of these occurrences could have a material adverse effect on our revenues, business, financial condition and results of operations. Further, we hold inventory of products that may be affected by these recent U.S. government actions, including potential order cancellations. If the sale of these products is delayed or we are unable to return or dispose of our inventory on favorable economic terms, we may incur additional carrying costs for the inventory or otherwise record charges associated with this inventory.

The administrative processing, attendant delays and risk of ultimately not obtaining required export approvals also put us at a disadvantage relative to our non-U.S. competitors who may not be required to comply with U.S. export controls. This difficulty and uncertainty has adversely affected our ability to compete for and win business from domestic customers in China.

It is possible that the U.S. government will impose additional export controls on our products or systems, which could lead to further revenue losses. For example, it remains uncertain what changes, if any, the new U.S. presidential administration will make with respect to U.S. export control policy. Any such changes could result in additional restrictions on our ability to sell products to customers in China and other jurisdictions. Foreign customers affected by current or future U.S. government sanctions, controls or threats of sanctions or controls may respond by developing their own solutions to replace our products or by utilizing our foreign competitors' products (who are not subject to the same export controls and can fulfill the orders). In addition, these export controls may also reduce overall global demand for our customers' products or for other products

produced or manufactured in the U.S. or based on U.S. technology, in turn reducing demand for our products, which could have a material adverse effect on our business, financial condition and results of operations. Increased restrictions on China exports may also lead to regulatory retaliation by the Chinese government, which may adversely impact our business. International trade disputes could result in increases in tariffs and other trade restrictions and protectionist measures that could adversely impact our operations and reduce the competitiveness of our products relative to local and global competitors.

**We are subject to compliance with domestic and foreign laws and regulations, and the burden of complying with such laws and regulations, or any failure to comply, has adversely affected and may continue to adversely affect our business, financial condition and results of operations.**

Our business is subject to risks inherent in doing business internationally, including compliance with, inconsistencies among, and unexpected changes in, a wide variety of foreign laws and regulatory environments, including, among other issues, with respect to employees, protection of our intellectual property, and a wide variety of operational regulations and trade and export controls under domestic, foreign, and international law.

We are faced with various risks that may be associated with our compliance with existing, new, different, inconsistent or conflicting laws, regulations and rules enacted by governments and/or their regulatory agencies in the countries in which we operate as well as rules and policies implemented at our customer sites. These laws, regulations, rules and policies could relate to any of an array of issues including, but not limited to, environmental, tax, intellectual property, trade secrets, product liability, contracts, antitrust, employment, securities, import/export and unfair competition. The cost of maintaining compliance under multiple and changing regulatory regimes may adversely affect our business, financial condition and results of operations, and, in the case of export controls, has adversely affected and may continue to adversely affect our results of operations. As discussed herein under the heading “Tariffs, export regulations, and other market barriers have impacted and may continue to impact our ability to compete for the business of domestic customers in China and other jurisdictions, which has adversely affected and may continue to adversely affect our, business, financial condition and results of operations,” the U.S. government issued new export control rules between 2022 and 2025 aimed at restricting China’s access to semiconductor equipment and advanced computing technology, among other things. To comply with the new rules, Onto Innovation has had to expend time and resources that might otherwise have been used for revenue generating activities. Further regulatory changes could require additional diversion of resources to compliance efforts. In addition, in the event that we fail to comply with or violate U.S. or foreign laws or regulations or customer policies, we could be subject to civil or criminal claims or proceedings that may result in monetary fines, penalties or other costs against us or our employees, which may adversely affect our operating results, financial condition, customer relations and ability to conduct our business.

**Political and economic instability may result in reduced demand for our products.**

We are subject to various global risks related to political and economic instabilities in countries in which we derive sales. If terrorist activities, armed conflict, civil or military unrest or political instability occurs outside of the United States, these events may result in reduced demand for our products or adversely affect our supply chain. For example, the Ukraine–Russia geographic region is a major source of critical raw materials used for semiconductor manufacturing (such as neon and palladium), and any supply chain disruptions or shortages of such materials due to the ongoing conflict in that region could impact our customers in a manner that reduces demand for our products. Similarly, if the conflict in Israel and Gaza and the surrounding area escalates, it could result in disruptions to our supply chain and/or the operations of our customers in a manner that reduces demand for our products.

In addition, due to the complex relationships among China, Hong Kong, Taiwan, and the United States, there is risk that political, diplomatic, and national security influences might lead to trade, technology, or capital disputes, or disruptions affecting the semiconductor industry. In particular, the escalation of geopolitical tensions between China and Taiwan may cause disruptions in the markets in which we operate and lead to a decreased demand for our products, which could adversely affect our business in Asia or have a negative impact on the regional or global economy.

Furthermore, an outbreak of hostilities or other political upheaval in China, Taiwan, Japan, or South Korea, or an economic downturn in Asia or globally, would likely harm the operations of our customers in these countries. The effect of these types of events on our revenue and cash flows could be material because we derive substantial revenue from sales to semiconductor device foundries in Taiwan such as Taiwan Semiconductor Manufacturing Company Ltd., from memory chip manufacturers in South Korea such as Samsung Electronics Co., Ltd., and from semiconductor device manufacturers in Japan such as Toshiba Corporation.

**Natural disasters, changes in climate, public health crises, and geo-political conflicts could materially adversely affect our worldwide operations (or those of our business partners).**

The occurrence of one or more natural disasters, such as hurricanes, tropical storms, fires, cyclones, earthquakes, tsunamis, flooding, typhoons, volcanic eruptions and weather conditions such as major or extended winter storms, droughts and tornadoes, whether as a result of climate change or otherwise, may disrupt manufacturing or other operations. For example, our Milpitas operations are located near major earthquake fault lines in California. We cannot provide any assurance that alternate means of conducting our operations (whether through alternate production capacity or service providers or otherwise) would be available if a major disruption were to occur or that, if such alternate means were available, they could be obtained on favorable terms.

Our business may also be affected by public health issues (for example, an outbreak of a contagious disease such as COVID-19, avian influenza, measles or Ebola). The effects of a public health crisis may affect our operations and those of our suppliers, third-party service providers, and customers. The extent to which the economic effects of a public health crisis could impact our business, results of operations, and financial conditions are difficult to predict, and depend on numerous evolving factors including any future resurgences of the public health crisis and the intensity and duration of any resulting adverse macroeconomic conditions. A public health crisis could expose our business, results of operations, and financial condition to the following adverse impacts: disruptions to our supply chain in connection with the sourcing of materials, support, and services; disruption of operations due to unavailability of employees as a result of illness, travel restrictions and other factors; and a decrease in demand for our products; Additional sustained or prolonged public health crises, or any ongoing, worsening or recurring supply chain disruptions or macroeconomic effects of such crises could have a material adverse effect on our business, results of operations, legal exposure, or financial condition and may also heighten many of the other risks described in this “Risk Factors” section.

There may also be conflict or uncertainty in the countries in which we operate, including safety issues, , disruptions of service from utilities, nuclear power plant accidents or general economic or political unrest, including war, civil unrest or terrorist attacks. We have no material operations in Russia, Belarus, Ukraine, or Israel. Consequently, to date, our operations have not been materially adversely affected by Russia’s invasion of Ukraine, or the Israel-Hamas conflict. However, if the Russia-Ukraine conflict and/or the conflicts in Israel and Gaza and the surrounding area escalate further, and/or the U.S. or other jurisdictions impose additional sanctions on the governments or entities involved, this could result in disruptions to the global economy and/or supply chains that could adversely affect our business.

**We may face difficulties in staffing and managing foreign branch operations due to political tensions or cultural differences.**

During periods of tension between the governments of the United States and certain other countries, it is often difficult for U.S. companies such as ours to staff and manage operations in such countries. Language and other cultural differences may also inhibit our sales and marketing efforts and create internal communication problems among our U.S. and foreign research and development teams, increasing the difficulty of managing multiple remote locations performing various development, quality assurance, and yield ramp analysis projects.

**Currency fluctuations may impact our international sales or expose us to exchange rate risk.**

A substantial portion of our international sales are denominated in U.S. dollars. As a result, if the dollar rises in value in relation to foreign currencies, our systems will become more expensive to customers outside the United States and may be less competitive with systems produced by competitors outside the United States. These conditions could negatively impact our international sales. Foreign sales also expose us to collection risk in the event it becomes more expensive for our foreign customers to convert their local currencies into U.S. dollars. Additionally, in the event a larger portion of our revenue becomes denominated in foreign currencies, we would be subject to a potentially significant exchange rate risk, and any failure to sufficiently hedge or otherwise manage these risks could materially and adversely affect our financial condition, results of operations, and liquidity.

**Our internal controls with respect to anti-corruption laws may not be effective, and any failure to comply with such laws may result in severe sanctions and liabilities, which may negatively affect our business, operating results and financial condition.**

We are subject to the Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”), and other laws that prohibit improper payments or offers of payments to foreign governments and their officials and political parties by U.S. persons and issuers as defined by the statute, for the purpose of obtaining or retaining business. Also, similar worldwide anti-bribery laws, such as the U.K. Bribery Act and Chinese anti-corruption laws, generally prohibit companies and their intermediaries from

making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. Some of our distribution partners are located in parts of the world that have experienced governmental corruption to some degree and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. The policies and procedures we have implemented to discourage these practices by our employees, our existing safeguards and any future improvements may prove to be ineffective, and our employees, consultants, sales agents or distributors may engage in conduct for which we might be held responsible. Violations of the FCPA or international anti-corruption laws may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition. In addition, the U.S. government may seek to hold us liable for successor liability FCPA violations committed by companies in which we invest or that we acquire. We cannot assure you that our internal control policies and procedures will protect us from reckless or negligent acts committed by our employees, distributors, partners, consultants or agents.

## **Risks Related to Laws, Legal Proceedings, Financial Markets and the Environment**

### **Changes in tax rates or tax liabilities could affect results.**

As a global company, we are subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Our future annual and quarterly tax rates could be affected by numerous factors, including changes in the (1) applicable tax laws; (2) composition of earnings in countries with differing tax rates; or (3) recoverability of our deferred tax assets and liabilities. Due to the pace of legislative changes and the scale of our business activities, any substantial changes in tax policies or legislative initiatives may materially and adversely affect our business, the taxes we are required to pay, our financial position, and results of operations. For example, beginning in 2022, the U.S. Tax Cuts and Jobs Act of 2017 (“TCJA”) eliminated the existing option to deduct research and development expenditures and requires taxpayers to amortize them over five years pursuant to IRC Section 174. The requirement reduced our cash flows for 2022, 2023 and 2024, and may continue to reduce our cash flows. In addition, any changes to U.S. and global corporate income tax laws, including increasing U.S. taxation of international business operations and imposing a global minimum tax could have a negative impact on our tax position in the future. Many countries and organizations, such as the Organization for Economic Cooperation and Development (“OECD”), which is discussed further below, are also actively considering changes to existing tax laws or have proposed or enacted new laws that could increase our tax obligations in countries where we do business or cause us to change the way we operate our business. Any of these developments or changes in federal, state, or international tax laws or tax rulings could adversely affect our effective tax rate and our results of operations.

The OECD has released guidance covering various topics, including country-by-country reporting, definitional changes to permanent establishment and Base Erosion and Profit Shifting (“BEPS”), an initiative that aims to standardize and modernize global tax policy. The guidance also established a global minimum tax of 15%. This guidance has been implemented by several jurisdictions, including jurisdictions in which we operate, and many other jurisdictions are in the process of implementing it. Depending on the final form of legislation ultimately enacted, there may be significant consequences for us due to our international business activities, including, but not limited to, an increase in our tax uncertainty and adverse effects on our provision for income taxes. The U.S. presidential administration has directed the U.S. Department of Treasury to develop options for “protective measures” in response to tax rules imposed by non-U.S. countries that are extraterritorial or disproportionately affect U.S. companies (which may include taxes imposed under the OECD guidance) and legislation has been introduced that would increase U.S. tax rates on non-U.S. companies and investors if their home jurisdictions impose discriminatory or extraterritorial taxes on U.S. companies, but we cannot predict whether such protective measures or legislation will be adopted or what, if any, responsive measures will be adopted by non-U.S. countries.

In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our results of operations.

### **Turmoil or fluctuations in the credit markets and the financial services industry may negatively impact our business, results of operations, financial condition or liquidity, and our factoring arrangements may expose us to additional risks.**

In the past, global credit markets and the financial services industry have experienced periods of turmoil and upheaval characterized by the tightening of the credit markets, the weakening of the global economy and an unprecedented level of intervention from the United States and other governments. Adverse economic conditions, such as sustained periods of economic uncertainty or a crisis in the financial markets may have a material adverse effect on our liquidity and financial condition if our ability to obtain credit from the capital financial markets, or from trade creditors is impaired. If banks and

financial institutions with whom we have banking relationships enter receivership or become insolvent in the future, we may be unable to access, and we may lose, some or all of our existing cash, cash equivalents and investments to the extent those funds are not insured or otherwise protected by the FDIC. In addition, a worsening economy or an economic crisis could also adversely impact our customers' ability to finance the purchase of systems from us or our suppliers' ability to provide us with product, either of which may negatively impact our business and results of operations.

**We are subject to various environmental laws and regulations that could impose substantial costs upon us, and failure to comply with such laws and regulations may harm our business, operating results and financial condition.**

Some of our operations use substances regulated under various federal, state, local, and international laws governing the environment, including those relating to the storage, use, discharge, disposal, labeling, and human exposure to hazardous and toxic materials. We could incur costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental laws. Liability under environmental laws can be joint and several and without regard to comparative fault. Compliance with current or future environmental laws and regulations could restrict our ability to expand our facilities or require us to acquire additional expensive equipment, modify our manufacturing processes, or incur other significant expenses. For example, we are, or may become subject to various new or proposed climate-related and other sustainability laws and regulations, including, for example, the state of California's new climate change disclosure requirements, the EU's new Corporate Sustainability Reporting Directive and proposed climate-change disclosure requirements from the SEC. Compliance with such laws and regulations, as well as any increased focus or scrutiny from the SEC and other regulators, investors, customers, vendors, employees, and other stakeholders concerning sustainability and climate matters, could impose additional costs on us. We may unintentionally violate environmental laws or regulations in the future as a result of human error, equipment failure or other causes. In addition to the potential adverse effects on our business operations of such an event, we are committed to maintaining safe working conditions for our employees and sourcing, manufacturing, and distributing our products in a responsible and environmentally friendly manner, and any failure on our part to do so may cause reputational harm for the Company.

**Legal proceedings, claims and investigations may expose us to increased costs and may negatively affect our business and results of operations.**

We have been from time to time, and in the future may be, involved in legal proceedings or claims regarding any number of matters, including intellectual property infringement, contract disputes, trade compliance, antitrust, environmental regulations, privacy and data protection, securities, product performance, product liability, employment and workplace safety, and other matters. In addition, we may receive, and have received, inquiries, warrants, subpoenas, and other requests for information in connection with government investigations of potential or suspected violations of law by our company and/or other companies that we work with. We have also received, and may receive in the future, claims from customers who believe we owe them product warranty protection, indemnification or other obligations.

Legal proceedings, claims, and government investigations, whether with or without merit, may be time-consuming and expensive to respond to and defend. They may also divert management's attention and our other resources from day-to-day operational matters; constrain our ability to sell products and services; result in adverse judgments for damages, injunctive relief, penalties and fines; and negatively affect our business and results of operations. We cannot predict the outcome of current or future legal proceedings, claims or investigations.

**Risks Related to Growth and Acquisitions**

**We may choose to acquire new and complementary businesses, products or technologies instead of developing them ourselves, and we may be unable to complete these acquisitions or may not be able to successfully integrate an acquired business in a cost-effective and non-disruptive manner.**

Our success depends on our ability to continually enhance and broaden our product offerings in response to customer-anticipated process changes, strategic opportunities for growth, and industry technology trends. To this end, we have, from time to time, engaged in the process of identifying, analyzing and negotiating possible acquisition transactions, and, from time to time, acquiring one or more businesses, and we expect to continue to do so in the future. We may choose to acquire new and complementary businesses, products, technologies and/or services instead of developing them ourselves. We may, however, face competition for acquisition targets from larger and more established companies with greater financial resources, making it more difficult for us to complete acquisitions. We cannot provide any assurance that we will be successful in consummating future acquisitions on favorable terms or that we will realize the benefits that we anticipate from one or more acquisitions that we consummate. Integrating any business, product, technology or service into our current operations could be expensive and

time-consuming and/or disrupt our ongoing business. Further, there are numerous risks associated with acquisitions and potential acquisitions, including, but not limited to:

- diversion of management's attention from day-to-day operational matters and current products and customers;
- lack of synergy or the inability to successfully integrate the new business or to realize expected synergies;
- integration of acquired businesses and their operations, including enterprise resource planning systems, may be costly and time-consuming and divert resources away from other projects;
- failure to commercialize the new technology or business;
- failure to meet the expected performance of the new technology or business;
- failure to retain key employees and customer or supplier relationships;
- lower-than-expected market opportunities or market acceptance of any new products; and
- unexpected reduction of sales of existing products as a result of the introduction of new products.

Our inability to consummate one or more acquisitions on favorable terms, or our failure to realize the intended benefits from one or more acquisitions, could have a material adverse effect on our business, liquidity, financial position and/or results of operations, including as a result of our incurrence of indebtedness and related interest expense and our assumption of unforeseen contingent liabilities. We might need to raise additional funds through public or private equity or debt financings to finance any acquisition. In that event, we could be forced to obtain financing on terms that are not favorable to us and, in the case of equity financing, that result in dilution to our stockholders. In addition, any impairment of goodwill or other intangible assets, amortization of intangible assets, write-down of other assets or charges resulting from the costs of acquisitions and purchase accounting could harm our business and operating results.

**If we cannot effectively manage growth, our business may suffer.**

Over the long-term, we intend to grow our business by increasing our sales efforts and completing strategic acquisitions. To effectively manage growth, we must, among other things:

- engage, train and manage a larger sales force and additional service personnel;
- expand the geographic coverage of our sales force;
- expand our information systems;
- identify and successfully integrate acquired businesses into our operations; and
- administer appropriate financial and administrative control procedures.

Growth of our business will likely challenge our management, financial, operational, technical, sales, administrative, and other resources. Any failure to effectively manage our growth may cause our business to suffer and our stock price to decline.

**Risks Related to the Global Economy and the Semiconductor Industry**

**Cyclicality in the semiconductor device industry has led to substantial decreases in demand for our systems in the past and may, from time to time, continue to do so.**

Our operating results are subject to significant variation due to global economic conditions and the cyclical nature of the semiconductor device industry. Our business depends upon the capital expenditures of semiconductor device manufacturers, which, in turn, depend upon the current and anticipated market demand for semiconductors and products using semiconductors. The timing, length and severity of the up-and-down cycles in the semiconductor equipment industry are difficult to predict. In recent history, the industry has experienced significant downturns, generally in connection with declines in economic conditions. This cyclical nature of the industry in which we operate affects our ability to accurately predict future revenue and, thus, future expense levels. When cyclical fluctuations result in lower-than-expected revenue levels, operating results may be adversely affected, and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be in a position to adjust our cost and expense structure to prevailing market conditions and to continue to motivate and retain our key employees. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand. We can provide no assurance that these objectives can be met in a timely manner in response to industry cycles, and we cannot predict when and to what extent sales may normalize, or when

and to what extent gross margins may improve, following any such occurrence. If we fail to respond to industry cycles, our business could be seriously harmed.

We may also experience supplier or customer issues as a result of adverse macroeconomic conditions. If our customers have difficulties in obtaining capital or financing, this could result in lower sales. Customers with liquidity issues could also result in an increase in bad debt expense. These conditions could also affect our key suppliers, which could affect their ability to supply parts and result in delays of our customer shipments.

**Our future rate of growth is highly dependent on the development and growth of the market for microelectronic device inspection, lithography and metrology equipment.**

We target our products to address the needs of microelectronic device manufacturers for defect inspection, metrology and lithography. If for any reason the market for microelectronic device inspection, lithography or metrology equipment fails to grow in the long term, we may be unable to maintain current revenue levels in the short term and maintain our historical growth in the long term. Growth in the inspection market is dependent to a large extent upon microelectronic manufacturers replacing manual inspection with automated inspection technology. Growth in the metrology market is dependent to a large extent upon new chip designs and capacity expansion of microelectronic manufacturers. Growth in the lithography market is dependent on the development of cost-effective packaging with high fine pitch RDLs, ultimately migrating to multi-die, large, form-factor packages. There can be no assurance that manufacturers will undertake these actions at the rate we expect.

**General Risk Factors**

**Provisions of our charter documents and of Delaware law could discourage potential acquisition proposals and/or delay, deter or prevent a change in control of our company.**

Provisions of our certificate of incorporation and by-laws may inhibit changes in control of our company not approved by our Board of Directors. These provisions also limit the circumstances in which a premium can be paid for our common stock and in which a proxy contest for control of our board may be initiated. These provisions provide for:

- a prohibition on stockholder actions through written consent;
- a requirement that special meetings of stockholders be called only by the chairperson of our Board of Directors or majority of our directors;
- advance notice requirements for stockholder proposals and director nominations by stockholders;
- the authority of our Board of Directors to issue, without stockholder approval, preferred stock with such terms as the Board may determine; and
- the authority of our board, without stockholder approval, to adopt a stockholder rights plan.

We are also entitled to avail ourselves of the protections of Section 203 of the Delaware General Corporation Law, which could inhibit changes in control of the Company.

**Our stock price is volatile.**

The market price of our common stock has fluctuated widely. Consequently, the current market price of our common stock may not be indicative of future market prices, and we may be unable to sustain or increase the value of an investment in our common stock. Factors affecting our stock price may include:

- variations in operating results from quarter to quarter;
- changes in earnings estimates by analysts or our failure to meet analysts' expectations;
- changes in the market price per share of our public company customers;
- market conditions in the semiconductor and other industries into which we sell products;
- general economic conditions;
- political changes, hostilities or natural disasters such as hurricanes and floods;
- the impact of infectious disease pandemics, on the global economy and on our customers, suppliers, employees, and business;

- low trading volume of our common stock; and
- the number of firms making a market in our common stock.

In addition, the stock market has experienced periods of significant price and volume fluctuations. These fluctuations have particularly affected the market prices of the securities of high technology companies like ours. Any such market fluctuations in the future could adversely affect the market price of our common stock.

#### **Item 1B. Unresolved Staff Comments.**

None.

#### **Item 1C. Cybersecurity**

##### **Cybersecurity Risk Management and Strategy**

We rely heavily on information technology (IT) systems in all aspects of our operations, and data security plays an important role in the protection of our proprietary information and that of our customers and suppliers. For these reasons, we take a number of steps to protect Onto Innovation's IT systems from internal and external cybersecurity threats.

Identifying and assessing cybersecurity risk is integrated into our overall risk management systems and processes. Cybersecurity risks related to our business, technical operations, and privacy and compliance issues are identified and addressed through a multi-faceted approach including third-party assessments, IT security, governance, risk and compliance reviews. To defend, detect and respond to cybersecurity incidents, we, among other things: conduct proactive cybersecurity reviews of systems and applications, perform penetration testing using external third-party tools and techniques to test security controls, conduct employee training, utilize an expert third party to continuously monitor and respond to possible threats, monitor emerging laws and regulations related to data protection and information security and implement appropriate changes. We regularly collaborate with leading security providers, industry groups, and industry peers to exchange information on trends and best practices to address new and evolving cybersecurity risks.

We have implemented incident response processes which have four overarching and interconnected stages: 1) preparation for a cybersecurity incident, 2) detection and review of an incident, 3) containment and remediation, and 4) post-incident review and analysis. Cybersecurity incident responses are managed by our Corporate Incident Response Team and overseen by our Vice President of IT.

Security events and data incidents are evaluated, ranked by severity and prioritized for response and remediation. Incidents are evaluated to determine materiality as well as operational and business impact, and reviewed for privacy impact.

We also conduct tabletop exercises to simulate responses to cybersecurity incidents. Our team of cybersecurity professionals then collaborates with technical and business stakeholders across our business units to further analyze the risk to the Company, and form detection, mitigation and remediation strategies.

As part of the above processes, we regularly engage external auditors and subject matter experts to assess our internal cybersecurity programs and compliance with applicable practices and standards. Since 2021, our Information Security Management System has been certified to conform to the requirements of ISO/IEC 27001:2013.

Our cybersecurity program also includes third-party assessments to identify and mitigate risks from third parties such as vendors, suppliers, and other business partners associated with our use of third-party service providers. Cybersecurity risks are evaluated when determining the selection and oversight of applicable third-party service providers and potential risks when handling and/or processing our employee, business or customer data. In addition to new vendor onboarding, we perform risk assessments during third-party cybersecurity compromise incidents to identify and mitigate risks to us from third-party incidents.

Our individual employees also play an important role in our information security systems. All employees are required to familiarize themselves with the Company's information security policies and, at least annually, employees are required to participate in an information security training program, which is designed to help employees identify potentially threats and train them on how to respond. Throughout the year, the IT department conducts phishing campaigns and other simulated hacking attacks with employees as a way of reminding them of their security obligations and ensuring that our SETA (security education and training awareness) has been effective.

As of the date of this Form 10-K, no risks from cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations, or financial condition.

For more information on the cybersecurity risks we face that could adversely impact us, please see “Part I, Item IA - Risk Factors - If our network security measures are breached and unauthorized access is obtained to a customer’s data, to our data, or to our information technology systems, we may incur significant legal and financial exposure and liabilities and may experience disruptions in our operations”.

### **Cybersecurity Governance**

The Company’s Board of Directors has oversight of information security matters at the Company, including reviewing the Company’s cybersecurity practices. At least annually, the Vice President of IT presents the Company’s information security policies and programs to the Board. Our Audit Committee is tasked with overseeing risks from cybersecurity threats. Members of the Audit Committee receive updates on cybersecurity matters on a quarterly basis from one or more representatives from the Company’s Cyber Security Council (“CSC”), which is composed of our business unit general managers, other members of senior management, our Vice President of IT and our IT Security Manager. These updates include a discussion of existing and new cybersecurity risks (if any), updates on how management is addressing and/or mitigating those risks, and the status of information security initiatives. Other Board members also engage in conversations with management on cybersecurity-related news events and discuss any updates to our cybersecurity risk management and strategy programs outside of the scheduled meetings.

The CSC is also responsible for the executive level supervision of the Company’s cybersecurity risk, information security, and technology risk, as well as the IT department’s actions to identify, assess, mitigate, and remediate cyber related issues. The CSC receives regular quarterly reports from the Vice President of IT on the Company’s cybersecurity risk profile and enterprise cybersecurity program.

We have also established a process whereby potentially material cybersecurity incidents are escalated to a Cybersecurity Disclosure Committee (“CDC”) consisting of our CEO, CFO, Vice President and General Counsel, Vice President of IT and Corporate Controller. The CDC is tasked with evaluating whether such incidents have material impact on the Company, and thus require disclosure, as well as any other actions that may be appropriate in response to the incident. The CDC promptly notifies the Audit Committee if it determines that an incident is likely to have a material impact on the Company and updates the Audit Committee on a quarterly basis of any incidents that it has evaluated and determined were not material.

The Vice President of IT acts as our head of information security in leading our information security organization. Our Vice President of IT has over 25 years of industry experience leading large technology organizations, including, most recently, as the leader of the IT organization at a large privately held company. Team members who support our information security program have relevant educational and industry experience, including holding similar positions at other technology companies.

**Item 2. Properties.**

Our principal executive office building is located at 16 Jonspin Road in Wilmington, Massachusetts. We own our Milpitas facility and lease facilities for corporate, engineering, manufacturing, sales and service-related purposes in the United States and seven other countries - China, Japan, South Korea, Singapore, Taiwan, Malaysia and Vietnam. The following table indicates the location, the general purpose and the square footage of our material facilities. Our leases expire at various times through July 1, 2029.

<b>Location</b>	<b>Facility Purpose</b>	<b>Approximate Square Footage</b>
Wilmington, Massachusetts	Corporate Headquarters, Engineering, Manufacturing and Service	77,500
Milpitas, California	Engineering, Manufacturing, Service and Administration	134,600
Budd Lake, New Jersey	Engineering, Service and Administration	48,900
Bloomington, Minnesota	Engineering, Manufacturing, Service and Administration	98,700
Bend, Oregon	Engineering and Service	12,700
Hillsboro, Oregon	Engineering and Service	10,000
Snoqualmie, Washington	Engineering and Service	20,300
Tucson, Arizona	Engineering, Manufacturing and Service	18,900
Taiwan	Sales and Service	38,600
China	Sales, Service and Engineering	26,700
South Korea	Sales and Service	29,200
Japan	Sales and Service	13,300
Singapore	Sales and Service	9,800

We also lease office space for other smaller sales and service offices in several locations throughout the world.

We believe that our existing facilities and capital equipment are adequate to meet our current requirements and that suitable additional or substitute space is available on commercially reasonable terms if needed.

**Item 3. Legal Proceedings.**

The information set forth under the heading “Legal Matters” in Note 9, “Commitments and Contingencies” to the Consolidated Financial Statements is incorporated herein by reference.

**Item 4. Mine Safety Disclosures.**

None.

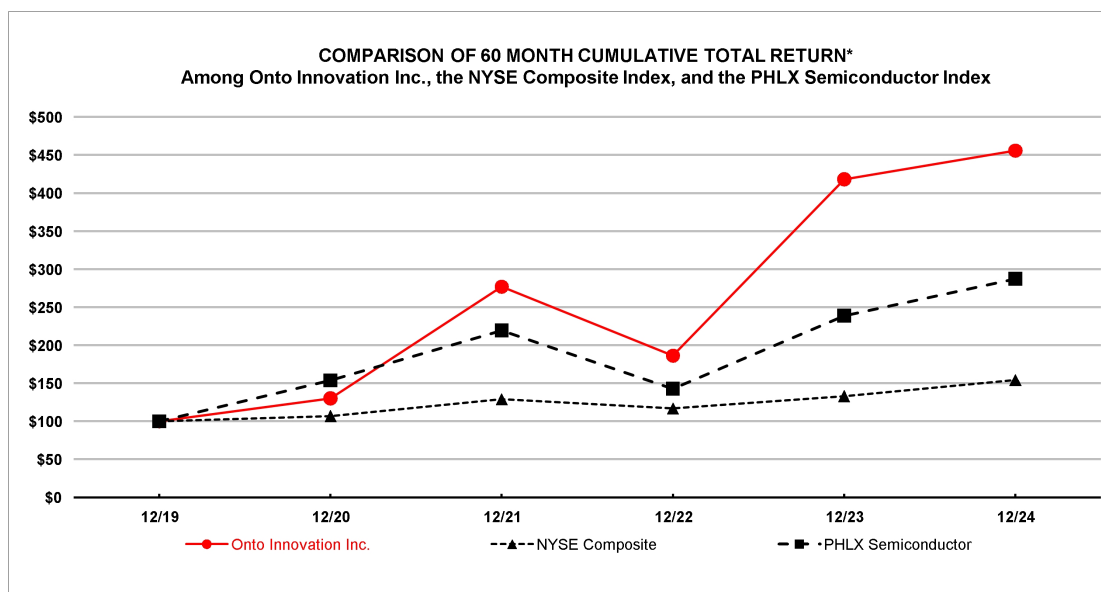
**PART II**

**Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.**

Our common stock, \$0.01 par value per share, is quoted on the New York Stock Exchange (“NYSE”) under the symbol “ONTO.” As of February 3, 2024, there were approximately 88 stockholders of record. Set forth below is a line graph comparing the annual percentage change in the cumulative return to the stockholders of the Company’s common stock with the cumulative return of the NYSE Composite Index and an industry specific index, the PHLX Semiconductor Index, for the period commencing on December 31, 2019 and ending on December 31, 2024.

The information contained in the performance graph shall not be deemed to be “soliciting material” or to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference into such filing.

The graph assumes that \$100 was invested on December 31, 2019 in the Company’s common stock and in each index. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.



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	12/19	12/20	12/21	12/22	12/23	12/24
Onto Innovation Inc.	100.0	130.1	277.0	186.3	418.2	455.8
NYSE Composite	100.0	107.0	129.1	117.0	133.2	154.2
PHLX Semiconductor	100.0	153.7	219.5	142.9	238.7	287.3

We have never declared or paid a cash dividend on our common stock and we currently do not intend to do so. The declaration of any future dividends by us is within the discretion of our Board of Directors and will be dependent on our earnings, financial condition and capital requirements as well as any other factors deemed relevant by our Board of Directors.

In February 2024, the Onto Innovation Board of Directors approved a share repurchase authorization, which allows us to repurchase up to \$200 million worth of shares of our common stock. Repurchases may be made through both public market and private transactions from time to time with shares purchased being subsequently retired. During the three and twelve months ended December 28, 2024, we repurchased 157 thousand shares of our common stock under this repurchase authorization. The amount paid to repurchase the shares in excess of par value, including transaction costs, is recorded directly as a decrease to additional paid-in capital and accumulated earnings. At December 28, 2024, there was \$174.9 million available for future share repurchases under the share repurchase authorization.

For further information, see Note 17 in the accompanying Notes to the Consolidated Financial Statements included in this Form 10-K.

In addition to our share repurchase program, we withhold common stock shares associated with net share settlements to cover tax withholding obligations upon the vesting of restricted stock unit awards under the Company's equity incentive program. During the three and twelve months ended December 28, 2024, we withheld 3 thousand and 102 thousand shares through net share settlements, respectively. For the three and twelve month periods ended December 28, 2024, net share settlements cost \$0.6 million and \$19.1 million, respectively. Please refer to Note 11 of the Notes to the Consolidated Financial Statements included in this Form 10-K for further discussion regarding our equity incentive plan.

The following table provides details of common stock purchased during the three-month period ended December 28, 2024:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program
		(in thousands, except for per share data)		
September 29, 2024 - October 28, 2024	2	\$ 205.36	—	\$ 200,000
October 29, 2024 - November 28, 2024	158	\$ 159.21	157	\$ 174,935
November 29, 2024 - December 28, 2024	1	\$ 166.29	—	\$ 174,935
Three Months Ended December 28, 2024	<u>161</u>		<u>157</u>	

<sup>1</sup> Includes shares withheld through net share settlements.

**Item 6. [Reserved]**

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

**Executive Summary**

We are a worldwide leader in the design, development, manufacture and support of process control tools that perform macro-defect inspection and metrology, lithography systems, and process control analytical software used by semiconductor and advanced packaging device manufacturers. We deliver comprehensive solutions throughout the semiconductor fabrication process with our families of proprietary products that provide critical yield-enhancing information, enabling microelectronic device manufacturers to drive down costs and time to market of their devices. We provide process and yield management solutions used in both wafer processing facilities, often referred to as “front-end” manufacturing, and in device packaging and test facilities, commonly referred to as “back-end” manufacturing. Our advanced process control software portfolio includes powerful solutions for standalone tools, groups of tools, or factory-wide suites to enhance productivity and achieve significant cost savings.

Our principal market is semiconductor capital equipment. Semiconductors packaged as ICs, or “chips,” are used in consumer electronics, server and enterprise systems, mobile computing (including smart phones and tablets), data storage devices, and embedded automotive and control systems. Our core focus is the measurement and control of the structure, composition, and geometry of semiconductor devices as they are fabricated on silicon wafers to improve device performance and manufacturing yields.

Our products and services are used by our customers who manufacture many types of ICs for a multitude of applications, each having unique manufacturing challenges. This includes ICs to enable information processing and management (logic ICs), memory storage (NAND, 3D-NAND, NOR, and DRAM), analog devices (e.g., Wi-Fi and 5G radio ICs, power devices), MEMS sensor devices (accelerometers, pressure sensors, microphones), image sensors, and other end markets including components for artificial intelligence, hard disk drives, LEDs, and power management.

The semiconductor and electronics industries have also been characterized by constant technological innovation. We believe that, over the long term, our customers will continue to invest in advanced technologies and new materials to enable smaller design rules and higher density applications that fuel demand for process control equipment.

The following table summarizes certain key financial information for the periods indicated below:

	Year Ended	
	December 28, 2024	December 30, 2023
	(in thousands, except for percentages and per share data)	
Revenue	\$ 987,321	\$ 815,868
Gross profit	\$ 515,308	\$ 420,254
Gross profit as a percent of revenue	52.2%	51.5%
Total operating expenses	\$ 328,205	\$ 304,176
Net income	\$ 201,670	\$ 121,159
Diluted earnings per share	\$ 4.06	\$ 2.46

- In fiscal 2024, revenue increased 21% compared to fiscal 2023, primarily due to an increase in sales in our inspection business of Dragonfly systems and other products in support of advanced packaging needs for chips used in Artificial Intelligence (AI) applications.
- Gross profit as a percentage of revenue increased to 52.2% for fiscal 2024 compared to 51.5% for fiscal 2023. This was primarily driven by an increase in volume and change in product mix, partially offset by write-downs related to the impairment and exit of certain lithography inventory in fiscal 2024.
- The increase in operating expenses in fiscal 2024 compared to fiscal 2023 was primarily due to increases in research and development, and sales and marketing expenses related to increased headcount and compensation costs, project costs, travel expenses and write-off of purchased in process research and development assets.

Our cash, cash equivalents and marketable securities balance increased to \$852.3 million at the end of fiscal 2024 from \$697.8 million at the end of fiscal 2023. This increase was primarily the result of \$245.7 million of cash generated from operating activities, partially offset by cash used for capital expenditures of \$31.9 million, acquisitions of \$26.8 million, purchases of common stock of \$25.1 million and \$19.0 million of cash used for tax payments related to net share settlement of employee stock-based compensation plans.

In recent years, the U.S. government implemented additional export regulations for U.S. semiconductor technology sold in China. We have applied for export licenses to continue doing business with our customers that are affected by the new export rules. However, the new export controls have resulted in lower net sales in China for fiscal 2024 compared to the prior fiscal years.

For a discussion of the risks related to our business and operations, see Part I, Item 1A – Risk Factors of this Annual Report on Form 10-K.

## Results of Operations

The following table sets forth, for the periods indicated, our results of operations as percentages of our revenue. Our results of operations are reported as one business segment.

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue	47.8 %	48.5 %	46.4 %
Gross profit	52.2 %	51.5 %	53.6 %
Operating expenses:			
Research and development	11.8 %	12.7 %	11.2 %
Sales and marketing	7.7 %	7.6 %	6.5 %
General and administrative	8.7 %	10.2 %	6.9 %
Amortization	5.0 %	6.7 %	5.5 %
Total operating expenses	33.2 %	37.2 %	30.1 %
Operating income	19.0 %	14.3 %	23.5 %
Interest income, net	3.4 %	2.5 %	0.5 %
Other expense, net	—%	(0.5)%	—%
Income before provision for income taxes	22.4 %	16.3 %	24.0 %
Provision for income taxes	1.9 %	1.4 %	1.8 %
Net income	20.5 %	14.9 %	22.2 %

## Results of Operations for 2024, 2023 and 2022

*Revenue.* Our revenue is derived from the sale of our systems and software, spare parts, and services. Our revenue was \$987.3 million, \$815.9 million and \$1,005.2 million for the years ended December 28, 2024, December 30, 2023 and December 31, 2022, respectively. This represents an increase of 21.0% from 2023 to 2024 and a decrease of 18.8% from 2022 to 2023.

The following table lists, for the periods indicated, the different sources of our revenue in dollars (thousands) and as percentages of our total revenue:

	Year Ended					
	December 28, 2024		December 30, 2023		December 31, 2022	
	(in thousands, except for percentages)					
Systems and software	\$ 850,443	86 %	\$ 683,316	84 %	\$ 865,707	86 %
Parts	76,584	8 %	74,604	9 %	84,266	8 %
Services	60,294	6 %	57,948	7 %	55,210	6 %
Total revenue	<u>\$ 987,321</u>	<u>100 %</u>	<u>\$ 815,868</u>	<u>100 %</u>	<u>\$ 1,005,183</u>	<u>100 %</u>

Total systems and software revenue increased \$167.1 million for the year ended December 28, 2024, as compared to the year ended December 30, 2023, primarily due to an increase in units shipped of our inspection product line to customers in support of advanced packaging needs for chips used in AI applications. Parts and services revenue is generated from part sales, maintenance service contracts, and system upgrades, as well as time and material billable service calls. During fiscal 2024, the increase in total parts and services revenue was primarily due to increased spending by our customers on system upgrades and repairs of existing systems.

Total systems and software revenue decreased \$182.4 million for the year ended December 30, 2023, as compared to the year ended December 31, 2022, primarily due to a decrease in units shipped of our metrology product lines to customers in advanced nodes applications. This decline was partially offset by an increase in units shipped of our inspection and lithography product lines to customers in specialty devices and advanced packaging applications. Parts and services revenue is generated

from part sales, maintenance service contracts, and system upgrades, as well as time and material billable service calls. During fiscal 2023, the decrease in total parts and services revenue was primarily due to lower factory utilization by several of our customers resulting in a decline in their spare parts requirements.

The following table sets forth, for the periods indicated, our revenue by geographic region as percentages of our revenue.

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands, except for percentages)		
Revenue	\$ 987,321	\$ 815,868	\$ 1,005,183
Taiwan	31 %	17 %	20 %
South Korea	29 %	21 %	22 %
China	12 %	17 %	25 %
United States	11 %	16 %	12 %
Japan	6 %	11 %	6 %
Southeast Asia	6 %	11 %	7 %
Europe	5 %	7 %	8 %
Total revenue	<u>100 %</u>	<u>100 %</u>	<u>100 %</u>

The overall Asia region continues to account for a majority of our revenues as a substantial amount of the worldwide capacity investments for semiconductor manufacturing continue to occur in this region and we expect that trend to continue.

*Gross Profit.* Our gross profit has been and will likely continue to be affected by a variety of factors, including manufacturing efficiencies, provision for excess and obsolete inventory, pricing by competitors or suppliers, new product introductions, production volume, inventory step-up from purchase accounting, customization and reconfiguration of systems, international and domestic sales mix, system and software product mix, and parts and services margins. Our gross profit was \$515.3 million, \$420.3 million and \$539.2 million for the years ended December 28, 2024, December 30, 2023, and December 31, 2022, respectively. Our gross profit represented 52.2%, 51.5% and 53.6% of our revenue for the years ended December 28, 2024, December 30, 2023, and December 31, 2022, respectively. The increase in gross profit as a percentage of revenue from 2023 to 2024 was primarily due to an increase in revenue volume and change in product mix, partially offset by write-downs related to the impairment and exit of certain lithography inventory. The decrease in gross profit as a percentage of revenue from 2022 to 2023 was primarily due to decreased revenue volume, unfavorable product mix, and increased manufacturing costs due to inflationary pressures during the 2023 fiscal period.

*Operating Expenses.*

Our operating expenses consist of:

- *Research and Development.* We believe that it is critical to continue to make substantial investments in research and development to ensure the availability of innovative technology that meets the current and projected requirements of our customers' most advanced designs. We have maintained, and intend to continue, our commitment to investing in research and development in order to continue to offer new products and technologies. Accordingly, we devote a significant portion of our technical, management and financial resources to research and development programs. Research and development expenditures consist primarily of salaries and related expenses of employees engaged in research, design and development activities. They also include consulting fees, the cost of related supplies and legal costs to defend our intellectual property. Our research and development expenses were \$116.8 million, \$104.4 million and \$112.0 million in fiscal years 2024, 2023 and 2022, respectively. The year-over-year dollar increase from 2023 through 2024 was primarily due to write-off of acquired in-process research and development of \$4.0 million and increased compensation costs of \$1.6 million, outside services costs of \$3.3 million, product development costs of \$1.9 million, travel costs of \$0.6 million, research and development project costs of \$0.5 million, freight and duty costs of \$0.2 million and depreciation expenses of \$0.2 million. The year-over-year dollar decrease from 2022 through 2023 was primarily due to decreases of \$4.6 million for the write-off of acquired in-process research and development assets and cost containment initiatives of \$3.3 million, partially offset by increases in depreciation expenses of \$0.6 million and travel expenses of \$0.3 million. We continue to maintain our commitment to investing in new product development and enhancement to existing products.

- ***Sales and Marketing.*** Sales and marketing expenses are primarily comprised of salaries and related costs for sales and marketing personnel, as well as commissions and other non-personnel related expenses. Our sales and marketing expenses were \$76.2 million, \$61.8 million and \$65.7 million in fiscal years 2024, 2023 and 2022, respectively. The year-over-year dollar increase from 2023 through 2024 was primarily due to increases in total compensation costs of \$13.0 million, travel costs of \$0.7 million, outside services costs of \$0.3 million, sales and marketing costs of \$0.3 million and production expenses of \$0.1 million. The year-over-year dollar decrease from 2022 through 2023 was primarily due to a decrease in total compensation costs of \$1.5 million on lower headcount and variable compensation plan elements, a decrease in outside service expenses of \$0.8 million and a decrease in depreciation expense of \$0.7 million, partially offset by an increase in travel expenses of \$0.3 million.
- ***General and Administrative.*** General and administrative expenses are primarily comprised of salaries and related costs for general administrative personnel, as well as other non-personnel related expenses. Our general and administrative expenses were \$85.8 million, \$83.1 million and \$69.6 million in fiscal years 2024, 2023 and 2022, respectively. The year-over-year dollar increase from 2023 through 2024 was primarily due to increases in depreciation expense of \$1.8 million and facilities expense of \$1.4 million, partially offset by a decrease in freight and duty costs of \$0.5 million. The year-over-year dollar increase from 2022 through 2023 was primarily due increased litigation expenses of \$7.4 million, restructuring charges of \$3.6 million for employee severance costs during the 2023 period, an increase in depreciation expense of \$1.9 million and an increase in facilities expenses of \$0.4 million.
- ***Amortization of Identifiable Intangible Assets.*** Amortization of identifiable intangible assets, primarily purchased technology, was \$49.4 million, \$54.8 million and \$55.3 million in fiscal years 2024, 2023 and 2022, respectively. The consecutive year-over-year dollar decreases from 2022 through 2024 were primarily due to certain assets becoming fully amortized.

***Interest income, net.*** In fiscal years 2024, 2023 and 2022, net interest income was \$33.5 million, \$20.4 million and \$5.0 million, respectively. The increases in net interest income from 2023 to 2024 and from 2022 to 2023 were due to higher average balances and higher interest rates during both the 2024 and 2023 periods, respectively.

***Income taxes.*** The following table provides details of income tax:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands, except for percentages)		
Income before provision for income taxes	\$ 220,447	\$ 132,582	\$ 241,584
Provision for income taxes	\$ 18,777	\$ 11,423	\$ 18,250
Effective tax rate	8.5%	8.6%	7.6%

The income tax provision differs from the federal statutory income tax rate of 21% for 2024 primarily due to a benefit related to the Foreign Derived Intangible Income Deduction (“FDII”) of \$17.0 million, tax effect of share-based compensation of \$6.9 million, tax benefits for research and development credits of \$6.6 million, a decrease to the Company’s valuation allowance of \$1.8 million, and a one-time benefit of \$3.2 million related to the recognition of a tax benefit associated with the lapse of a statute of limitations. These benefits were partially offset by non-deductible officer’s compensation of \$3.4 million.

The income tax provision differs from the federal statutory income tax rate of 21% for 2023 primarily due to a benefit related to the FDII of \$13.0 million, excess benefits related to stock compensation of \$3.4 million, tax benefits for research and development credits of \$6.4 million, and a one-time benefit of \$1.6 million related to the recognition of a tax benefit associated with the lapse of a statute of limitations. These benefits were partially offset by the inclusion of U.S. tax on foreign source income of \$0.5 million and non-deductible officer’s compensation of \$2.3 million, and an increase to the Company’s valuation allowance of \$2.9 million.

The income tax provision differs from the federal statutory income tax rate of 21% for 2022 primarily due to a benefit related to the FDII of \$25.4 million, excess benefits related to stock compensation of \$3.5 million, tax benefits for research and development credits of \$7.1 million, and a one-time benefit of \$1.5 million related to the recognition of a tax benefit associated with the lapse of a statute of limitations. These benefits were partially offset by the inclusion of U.S. tax on foreign source income of \$1.4 million and non-deductible officer’s compensation of \$1.9 million.

Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, the amount of our pre-tax income as business activities fluctuate, non-deductible expenses incurred in connection with acquisitions and research and development credits as a percentage of aggregate pre-tax income.

### Liquidity and Capital Resources

Our cash, cash equivalents and marketable securities consist of the following:

	Year Ended	
	December 28, 2024	December 30, 2023
	(in thousands)	
Cash and cash equivalents	\$ 212,945	\$ 233,508
Marketable securities	639,383	464,303
Total cash, cash equivalents and marketable securities	<u>\$ 852,328</u>	<u>\$ 697,811</u>

### Sources and Uses of Cash

A summary of cash provided by (used in) operating, investing, and financing activities is as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Cash provided by operating activities	\$ 245,676	\$ 171,973	\$ 136,703
Cash used in investing activities	\$ (226,547)	\$ (103,387)	\$ (55,691)
Cash used in financing activities	\$ (35,673)	\$ (9,475)	\$ (68,350)

### Operating Activities

Cash provided by operating activities during fiscal 2024 was \$245.7 million, which reflects net income, adjusted to exclude the effect of non-cash operating charges, of \$290.2 million. Significant non-cash operating charges included depreciation, amortization, share-based compensation, provision for inventory valuation, deferred income taxes and write off of acquired in-process research and development. Cash provided by operating activities in fiscal 2024 increased compared to fiscal 2023 primarily due to higher net income and continued improvements in inventory management.

Cash provided by operating activities during fiscal 2023 was \$172.0 million, which reflects net income, adjusted to exclude the effect of non-cash operating charges, of \$204.5 million. Significant non-cash operating charges included depreciation, amortization, share-based compensation, provision for inventory valuation and deferred income taxes. Cash provided by operating activities in fiscal 2023 increased compared to fiscal 2022 primarily due to improved inventory management and lower income tax payments.

Our working capital was \$1,307.4 million at December 28, 2024 and \$1,135.5 million at December 30, 2023.

### Investing Activities

We used \$226.5 million, \$103.4 million and \$55.7 million of cash in investing activities in fiscal 2024, 2023 and 2022, respectively. Capital expenditures, net of proceeds in fiscal 2024, 2023 and 2022 were \$31.9 million, \$19.8 million and \$18.4 million. Capital expenditures were primarily for enterprise resource planning systems implementation, investments in facility improvements, demonstration and testing equipment, manufacturing and network equipment. Purchases of marketable securities, net of proceeds from sales and maturities of marketable securities, for fiscal 2024, 2023 and 2022 was \$167.9 million, \$83.6 million and \$4.6 million, respectively. Net cash paid for acquisitions in fiscal 2024 and 2022 was \$26.8 million and \$4.6 million, respectively. There were no acquisitions in fiscal 2023.

From time to time, we evaluate whether to acquire new or complementary businesses, products or technologies. We may fund all of or a portion of the price of these investments or acquisitions in cash, stock, or a combination of cash and stock.

### Financing Activities

We used \$35.7 million, \$9.5 million and \$68.4 million of cash in financing activities for fiscal 2024, 2023 and 2022, respectively. Purchases of our common stock were \$25.1 million, \$3.2 million and \$65.3 million in fiscal 2024, 2023 and 2022, respectively. Tax withholding payments for vested equity awards, partially offset by proceeds from sales of shares through share-based compensation plans were \$9.9 million, \$5.5 million and \$0.8 million for fiscal 2024, 2023 and 2022, respectively. Payments for contingent consideration for acquired business were \$0.7 million, \$0.8 million and \$2.3 million in fiscal 2024, 2023 and 2022.

We have a credit agreement with a bank that provides for a variable-rate line of credit that is secured by the marketable securities we have with the bank. We are permitted to borrow up to 70% of the value of eligible securities held at the time the line of credit is accessed, up to a maximum of \$100 million. As of December 28, 2024, the available line of credit was approximately \$100.0 million with an available interest rate of 6.2%. The credit agreement is available to us until such time that either party terminates the arrangement at its discretion. As of the date of this filing, we have not utilized the line of credit.

Our future capital requirements will depend on many factors, including the timing and amount of our revenue and our investment decisions, which will affect our ability to generate additional cash. We expect that our existing cash, cash equivalents, marketable securities and availability under our line of credit will be sufficient to meet our anticipated cash requirements for working capital, capital expenditures and other cash needs for the next 12 months following the filing of this Form 10-Q. Thereafter, if cash generated from operations and financing activities is insufficient to satisfy our working capital requirements, we may seek additional funding through bank borrowings, sales of securities or other means. In addition, a reduction in or volatility with respect to our stock price or a general market downturn could materially impact our ability to sell securities on favorable terms or at all. There can be no assurance that we will be able to raise any such capital on terms acceptable to us or at all.

### Contractual Obligations

The following table summarizes our significant contractual obligations at December 28, 2024, and the effect such obligations are expected to have on our liquidity and cash flows in future periods. We are currently unable to provide a reasonably reliable estimate of the amount or periods when cash settlement of this liability may occur.

	Payments due by period				
	Total	Less than 1 year	1-3 years (in thousands)	3-5 years	More than 5 years
Operating lease obligations	\$ 16,842	\$ 6,095	\$ 7,177	\$ 3,570	\$ —
Purchase obligations <sup>(1)</sup>	438,193	243,932	194,261	—	—
Total	\$ 455,035	\$ 250,027	\$ 201,438	\$ 3,570	\$ —

<sup>(1)</sup> Represents our agreements to purchase goods and services consisting of outstanding purchase orders for goods and services.

### Critical Accounting Estimates

Management's discussion and analysis of our financial condition and results of operations are based upon our Consolidated Financial Statements included in this Form 10-K, which have been prepared in accordance with accounting principles generally accepted in the United States. Note 2 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 and involve critical accounting estimates. We review the accounting policies we use in reporting our financial results on a regular basis. The preparation of the financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, accounts receivable, inventories, business acquisitions, intangible assets, share-based payments, income taxes and warranty obligations. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Results may differ from these estimates due to actual outcomes being different from those on which we based our assumptions. These estimates and judgments are regularly reviewed by management on an ongoing basis at the end of each quarter prior to the public release of our financial results.

Management believes that the following are critical accounting estimates:

*Revenue Recognition.* Revenue is recognized when control of the promised goods or services are transferred to our customers in an amount that reflects the consideration we expect to be entitled to receive in exchange for those goods or services. We account for a contract when it has approval and commitment from both parties, the rights of the parties and payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

Contracts with customers may include multiple performance obligations. For such arrangements, we allocate revenue to each performance obligation based on its relative standalone selling price. We generally determine standalone selling prices based on the prices charged to customers or the expected cost-plus margin.

Revenue from systems is recognized when we transfer control of the product to our customer. To indicate transfer of control, we must have a present right to payment, legal title must have passed to the customer and the customer must have the significant risks and rewards of ownership. We generally transfer control for system sales when the customer or the customer's agent picks up the system at our facility. We provide an assurance warranty on our systems for a period of twelve to fourteen months against defects in material and workmanship. We provide for the estimated cost of product warranties at the time revenue is recognized.

Depending on the terms of the systems arrangement, we may also defer the recognition of a portion of the consideration expected to be received because we have to satisfy a future obligation (e.g., installation and extended warranties). We use an observable price to determine the standalone selling price for separate performance obligations or a cost-plus margin approach when one is not available.

Revenue from software licenses, which is primarily sold without systems, is recognized upfront at the point in time when the software is made available to the customer. Software licenses provide the customer with limited rights to use the software. Revenue from licensing support and maintenance is recognized as the support and maintenance are provided, which is over the contract period.

Revenue from parts is recognized when we transfer control of the product, which typically occurs when we ship the product from our facilities to the customer.

Revenue from services primarily consists of service contracts, which provide additional maintenance coverage beyond our assurance warranty on our products, service labor, consulting and training. Revenue from service contracts is recognized ratably over the term of the service contract. Revenue from service labor and consulting is recognized as services are performed.

We record contract liabilities when the customer has been billed in advance of completing our performance obligations. These amounts are recorded as deferred revenue in the Consolidated Balance Sheets.

*Business combinations.* We account for business combinations under the acquisition method of accounting, which requires us to recognize separately from goodwill the assets acquired, and the liabilities assumed at their acquisition date fair values. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recognized in our consolidated statements of operations. Accounting for business combinations requires our management to make significant estimates and assumptions, especially at the acquisition date including our estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies, and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based, in part, on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Estimates in valuing certain acquired intangible assets under the income approach include growth in future expected cash flows from product sales, acquired technologies, technology obsolescence rates, estimated cash flows from the projects when completed and discount rates. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

*Inventory Valuation.* Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less predictable costs of completion, disposal and transportation. Cost is generally determined on a first-in, first-out basis, and includes material, labor and manufacturing overhead costs. We review and set standard costs as needed, but at a minimum, on an annual basis, at current manufacturing costs in order to approximate actual costs. We maintain reserves for our excess and obsolete inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future product lifecycles, product demand and market conditions.

If actual product lifecycles, product demand and market conditions are less favorable than those originally projected by management, additional inventory write-downs may be required.

*Indefinite-Lived and Long-Lived Assets.* Goodwill is tested for impairment during the fourth quarter, or whenever events or circumstances indicate that its carrying value may not be recoverable. Goodwill impairment is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment. Goodwill is reviewed for impairment using either a qualitative assessment or a quantitative goodwill impairment test. If the Company chooses to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. When the Company performs the quantitative goodwill impairment test, it compares fair value to carrying value, which includes goodwill. If fair value exceeds carrying value, the goodwill is not considered impaired. If the carrying value is higher than the fair value, the difference would be recognized as an impairment loss.

For other long-lived assets, we periodically review long-lived assets, other than goodwill, for impairment whenever changes in events or circumstances indicate that the carrying amount of an asset may not be recoverable. Assumptions and estimates used in the determination of impairment losses, such as future cash flows and disposition costs, may affect the carrying value of long-lived assets and the impairment of such long-lived assets, if any, could have a material effect on our consolidated financial statements.

*Income Taxes.* As part of the process of preparing our consolidated financial statements, we are required to estimate our current tax exposure together with our temporary differences resulting from differing treatment of items for tax and accounting purposes. These temporary differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet. We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent we believe that recovery is not likely, we must establish a valuation allowance. Management judgment is required in determining our provision for income taxes and any valuation allowance recorded against our deferred tax assets. The need for a valuation allowance is based on our estimates of taxable income by jurisdiction in which we operate and the period over which our deferred taxes will be recoverable. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust the valuation allowance, which could materially impact our financial position and results of operations.

We recognize liabilities for uncertain tax positions based on a two-step process. The first step requires us to determine if the weight of available evidence indicates that the tax position has met the threshold for recognition; therefore, we must evaluate whether it is more likely than not that the position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step requires us to measure the tax benefit of the tax position taken, or expected to be taken, in an income tax return as the largest amount that is more than 50% likely of being realized when effectively settled. This measurement step is inherently difficult and requires subjective estimations of such amounts to determine the probability of various possible outcomes. We reevaluate the uncertain tax positions each quarter based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues, and new audit activity. Such a change in recognition or measurement could result in the recognition of a tax benefit or an additional charge to the tax provision in the period.

## **Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**

### *Interest Rate and Credit Market Risk*

We are exposed to changes in interest rates and market liquidity including our investments in certain available-for-sale securities. Our available-for-sale securities consist of fixed and variable rate income investments, such as municipal notes, municipal bonds and corporate bonds. We continually monitor our exposure to changes in interest rates, market liquidity and credit ratings of issuers for our available-for-sale securities. It is possible that we are at risk if interest rates, market liquidity or credit ratings of issuers change in an unfavorable direction. The magnitude of any gain or loss will be a function of the difference between the fixed or variable rate of the financial instrument and the market rate, and our financial condition and results of operations could be materially affected. Based on a sensitivity analysis performed on our financial investments held as of December 28, 2024, a hypothetical increase of 100 basis points in interest rates would result in a decrease of \$3.4 million in the fair value of our available-for-sale debt securities and would not have a material impact on our consolidated financial position, results of operations or cash flows.

### *Foreign Currency Risk*

We enter into foreign currency forward contracts to minimize the short-term impact of exchange rate fluctuations on certain foreign currency denominated monetary assets and liabilities, primarily cash and intercompany receivables and payables. In addition, we hedge certain anticipated foreign currency cash flows, primarily on revenues denominated in Japanese yen. These forward contracts are not designated as accounting hedges, so the change in fair value of the forward exchange contracts is recognized under the caption “Other expense, net” in the Consolidated Statements of Operations for each reporting period. As of December 28, 2024, and December 30, 2023, we had fifty-six and thirty-eight outstanding forward contracts, respectively, with a total notional contract value of \$45.9 million and \$51.6 million, respectively. We do not use derivative financial instruments for trading or speculative purposes.

## **Item 8. Financial Statements and Supplementary Data.**

The consolidated financial statements and related information required by this Item are set forth on the pages indicated in Item 15(a) of this Form 10-K.

## **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

## **Item 9A. Controls and Procedures.**

### **Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time period specified in SEC rules and forms. These controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating disclosure controls and procedures, we have recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Management is required to apply judgment in evaluating its controls and procedures.

We performed an evaluation under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, to assess the effectiveness of the design and operation of our disclosure controls and procedures under the Exchange Act as of December 28, 2024. Based on that evaluation, our management, including our principal executive officer and principal financial officer, concluded that our disclosure controls and procedures were effective as of December 28, 2024 at the reasonable assurance level.

### **Management’s Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). 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 accounting principles generally accepted in the United States of America. Under the supervision and with the participation of our management, including our principal executive officer and principal

financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on our evaluation, our management concluded that our internal control over financial reporting was effective as of December 28, 2024.

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 be circumvented or deteriorate.

#### **Attestation Report of the Registered Public Accounting Firm**

Our consolidated financial statements as of and for the year ended December 28, 2024 have been audited by Ernst & Young LLP, our independent registered public accounting firm, in accordance with the standards of the Public Company Accounting Oversight Board (United States). Ernst & Young LLP has also audited our internal control over financial reporting as of December 28, 2024, as stated in its attestation report included elsewhere in this Form 10-K.

#### **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during our fiscal quarter ended December 28, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### **Item 9B. Other Information.**

##### *Rule 10b5-1 Plan Elections*

During the fiscal quarter ended December 28, 2024, none of our directors or officers (as defined in Rule 16a-1 under the Exchange Act) adopted, modified or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 105b-1 trading arrangement” (as those terms are defined in Item 408 of Regulation S-K).

#### **Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.**

Not applicable.

### PART III

Certain information required by Part III is omitted from this Form 10-K because we expect to file a definitive proxy statement within one hundred twenty (120) days after the end of our fiscal year pursuant to Regulation 14A (the “Proxy Statement”) for our Annual Meeting of Stockholders currently scheduled for May 21, 2025, and such information included in the Proxy Statement is incorporated herein by reference, as specified below.

#### **Item 10. Directors, Executive Officers and Corporate Governance.**

The information required by this Item with respect to directors and executive officers is incorporated by reference to the information under the headings “Proposal 1: Election of Directors,” “Executive Officer Biographies” and “Corporate Governance Principles and Practices” in the Proxy Statement. Information regarding compliance with Section 16 of the Exchange Act is incorporated by reference to the information under the heading “Delinquent Section 16(a) Reports” in the Proxy Statement, if any.

**Code of Business Conduct and Ethics.** We have adopted a code of business conduct and ethics that applies to our principal executive officer, principal financial officer and controller. This code of business conduct and ethics is posted on our internet website address at <http://investors.ontoinnovation.com>. We will post on our website any amendment to or waiver from a provision of our code of business conduct and ethics as may be required, and within the time period specified, by applicable SEC rules.

We have adopted an insider trading policy governing the purchase, sale and other dispositions of our securities by our directors, officers and employees that we believe is reasonably designed to promote compliance with insider trading laws, rules and regulations, and any applicable listing standards.

#### **Item 11. Executive Compensation.**

The information required by this Item is incorporated by reference to the information under the headings “Executive Officer Compensation,” “Compensation of Directors,” “Executive Officer Compensation Tables,” “Compensation Committee Report on Executive Officer Compensation,” “Stock Ownership/Retention Guidelines for Directors” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement.

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

The information required by this Item is incorporated by reference to the information under the headings “Security Ownership of Certain Beneficial Owners” and “Equity Compensation Plan Information” in the Proxy Statement.

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

The information required by this Item is incorporated by reference to the information under the headings “Related Persons Transaction Policy” and “Board Independence” in the Proxy Statement.

#### **Item 14. Principal Accountant Fees and Services.**

The information required by this Item is incorporated by reference to the information under the heading “Proposal 3: Ratification of Appointment of Independent Registered Public Accounting Firm” in the Proxy Statement.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules.**

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

1. Financial Statements

The consolidated financial statements and consolidated financial statement information required by this Item are included on pages F-1 through F-9 of this report. The Reports of Independent Registered Public Accounting Firm appear on pages F-1 through F-3 of this report.

2. Financial Statement Schedule

See Index to financial statements on page 47 of this report.

3. Exhibits

Exhibits are as set forth in the “Exhibit Index”, provided below. Where so indicated, exhibits, which were previously filed, are incorporated by reference.

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<u>Exhibit No.</u>	<u>Exhibit Description</u>	<u>Form</u>	<u>File Number</u>	<u>Date of First Filing</u>	<u>Exhibit No./Appendix Reference</u>
<a href="#"><u>3.1</u></a>	<a href="#"><u>Amended and Restated Certificate of Incorporation of Onto Innovation Inc.</u></a>	<a href="#"><u>8-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>October 28, 2019</u></a>	<a href="#"><u>3.2</u></a>
<a href="#"><u>3.2</u></a>	<a href="#"><u>Amended and Restated Bylaws of Onto Innovation Inc.</u></a>	<a href="#"><u>8-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>January 27, 2020</u></a>	<a href="#"><u>3.1</u></a>
<a href="#"><u>4.1</u></a>	<a href="#"><u>Form of Common Stock Certificate</u></a>	<a href="#"><u>10-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>February 25, 2020</u></a>	<a href="#"><u>4.2</u></a>
<a href="#"><u>4.2</u></a>	<a href="#"><u>Description of Securities</u></a>	<a href="#"><u>10-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>February 25, 2020</u></a>	<a href="#"><u>4.1</u></a>
<a href="#"><u>10.1*</u></a>	<a href="#"><u>Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>10-Q</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>August 8, 2024</u></a>	<a href="#"><u>10.1</u></a>
<a href="#"><u>10.2*+</u></a>	<a href="#"><u>Form of Employee Stock Option Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>
<a href="#"><u>10.3*+</u></a>	<a href="#"><u>Form of Director Stock Option Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>
<a href="#"><u>10.4*+</u></a>	<a href="#"><u>Form of Executive Restricted Stock Unit Grant Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>
<a href="#"><u>10.5*+</u></a>	<a href="#"><u>Form of Executive Performance Stock Unit Grant Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>	<a href="#"><u>-</u></a>
<a href="#"><u>10.6*</u></a>	<a href="#"><u>Form of Employee Restricted Stock Unit Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>10-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>February 26, 2024</u></a>	<a href="#"><u>10.6</u></a>
<a href="#"><u>10.7*</u></a>	<a href="#"><u>Form of Director Restricted Stock Unit Purchase Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>10-K</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>February 26, 2024</u></a>	<a href="#"><u>10.7</u></a>
<a href="#"><u>10.8*</u></a>	<a href="#"><u>Form of Employee Performance Stock Unit Purchase Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>10-Q</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>August 5, 2021</u></a>	<a href="#"><u>10.1</u></a>
<a href="#"><u>10.9*</u></a>	<a href="#"><u>Form of Employee Incentive Restricted Stock Unit Purchase Agreement for usage under the Onto Innovation Inc. 2020 Stock Plan, as amended and restated</u></a>	<a href="#"><u>10-Q</u></a>	<a href="#"><u>001-39110</u></a>	<a href="#"><u>November 4, 2021</u></a>	<a href="#"><u>10.1</u></a>

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<u>Exhibit No.</u>	<u>Exhibit Description</u>	<u>Form</u>	<u>File Number</u>	<u>Date of First Filing</u>	<u>Exhibit No./Appendix Reference</u>
<a href="#">10.10*</a>	<a href="#">Onto Innovation Inc. 2020 Employee Stock Purchase Plan</a>	<a href="#">S-8</a>	<a href="#">333-238492</a>	<a href="#">May 19, 2020</a>	<a href="#">10.2</a>
<a href="#">10.11*</a>	<a href="#">Form of Onto Innovation Inc. Indemnification Agreement</a>	<a href="#">8-K</a>	<a href="#">001-39110</a>	<a href="#">September 13, 2021</a>	<a href="#">10.1</a>
<a href="#">10.12*</a>	<a href="#">Employment Agreement, dated as of September 15, 2023, by and between Onto Innovation Inc. and Michael P. Plisinski* incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on September 15, 2023 (File No. 001-39110).</a>	<a href="#">8-K</a>	<a href="#">001-39110</a>	<a href="#">September 15, 2023</a>	<a href="#">10.1</a>
<a href="#">10.13*</a>	<a href="#">Offer Letter to Yoon Ah E. Oh, dated October 4, 2021, by and between Yoon Ah E. Oh and Onto Innovation Inc.</a>	<a href="#">10-Q</a>	<a href="#">001-39110</a>	<a href="#">May 3, 2022</a>	<a href="#">10.1</a>
<a href="#">10.14*</a>	<a href="#">Offer Letter to Mark Slicer, dated April 1, 2022, by and between Mark Slicer and Onto Innovation Inc.</a>	<a href="#">8-K</a>	<a href="#">001-39110</a>	<a href="#">May 17, 2022</a>	<a href="#">10.1</a>
<a href="#">10.15*+</a>	<a href="#">Offer Letter to Ramil Yaldaei, dated April 25, 2023, by and between Ramil Yaldaei and Onto Innovation Inc.</a>	-	-	-	-
<a href="#">10.16*+</a>	<a href="#">Offer Letter to Srinivas Vedula, dated August 30, 2021</a>	-	-	-	-
<a href="#">10.17*</a>	<a href="#">Form of Executive Change in Control Agreement</a>	<a href="#">10-K</a>	<a href="#">001-39110</a>	<a href="#">February 24, 2023</a>	<a href="#">10.13</a>
<a href="#">19+</a>	<a href="#">Onto Innovation Inc. Insider Trading Policy</a>	-	-	-	-
<a href="#">21.1+</a>	<a href="#">Subsidiaries.</a>	-	-	-	-
<a href="#">23.1+</a>	<a href="#">Consent of Ernst &amp; Young LLP, Independent Registered Public Accounting Firm.</a>	-	-	-	-
<a href="#">31.1+</a>	<a href="#">Rule 13a-14(a) Certification of Chief Executive Officer of the Registrant pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>	-	-	-	-
<a href="#">31.2+</a>	<a href="#">Rule 13a-14(a) Certification of Chief Financial Officer of the Registrant pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</a>	-	-	-	-
<a href="#">32.1+</a>	<a href="#">Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>	-	-	-	-
<a href="#">32.2+</a>	<a href="#">Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</a>	-	-	-	-
<a href="#">97</a>	<a href="#">Onto Innovation Inc. Incentive Compensation Recovery Policy</a>	<a href="#">10-K</a>	<a href="#">001-39110</a>	<a href="#">February 26, 2024</a>	<a href="#">97</a>
101.INS	Inline XBRL Instance Document				
101.SCH	Inline XBRL Taxonomy Extension Schema Document				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (formatted in inline XBRL and contained in Exhibit 101)				
*	Management contract, compensatory plan or arrangement.				
+	Filed herewith				

**ONTO INNOVATION INC.**  
**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND**  
**FINANCIAL STATEMENT SCHEDULE**

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<a href="#">Reports of Independent Registered Public Accounting Firm (PCAOB ID Number 42)</a>	F-1
<a href="#">Consolidated Statements of Operations for the years ended December 28, 2024, December 30, 2023 and December 31, 2022</a>	F-4
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**Item 16. Form 10-K Summary.**

None

## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Onto Innovation Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Onto Innovation Inc. (the Company) as of December 28, 2024 and December 30, 2023, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 28, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 28, 2024 and December 30, 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 28, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 28, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 25, 2025 expressed an unqualified opinion thereon.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

### Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosure to which it relates.

#### *Reserve for Excess and Obsolete Inventory*

##### *Description of the Matter*

As described in Notes 2 and 8 to the consolidated financial statements, the Company records inventory net of a reserve for excess and obsolete inventory resulting in net inventories of \$287.0 million as of December 28, 2024. The valuation of certain of the Company's inventory is subject to risks associated with supply and demand. As described in Note 2 to the consolidated financial statements, the Company maintains reserves for excess and obsolete inventory equal to the difference between the cost of inventory and its estimated net realizable value based upon assumptions about historical and future demand for the Company's products and market conditions.

Auditing management's estimate of the excess and obsolete inventory reserve was subjective and required significant judgment as the excess and obsolete inventory reserve is sensitive to changes in the Company's

operations and assumptions used to estimate the reserve including management's assumptions with regards to product life-cycles, product demand and market conditions, which includes historical usage, expected future usage, on-hand quantities of individual materials, and anticipated engineering design changes or advancements.

*How We Addressed the Matter in Our Audit* We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's excess and obsolete inventory reserve process, including those over the validity and reasonableness of the data and assumptions used in estimating the excess and obsolete inventory reserve.

To test the adequacy of the Company's excess and obsolete inventory reserve, we performed audit procedures that included, among others, assessing methodologies and assumptions used, testing the completeness and accuracy of the underlying data used by management in its analysis including the usage of historical materials, considering potential product obsolescence, observing physical inventory on-hand and inspecting historical gross margins to assess whether any items are being sold at a loss or lower margins that may need to be included in the reserve. We assessed the historical accuracy of management's estimated excess and obsolete inventory reserve and performed sensitivity analyses to evaluate changes in the estimate that result from changes in the Company's significant assumptions.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Iselin, New Jersey

February 25, 2025

## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Onto Innovation Inc.

### Opinion on Internal Control Over Financial Reporting

We have audited Onto Innovation Inc.'s internal control over financial reporting as of December 28, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Onto Innovation Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 28, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 28, 2024 and December 30, 2023, the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 28, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated February 25, 2025 expressed an unqualified opinion thereon.

### Basis for Opinion

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 Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

### Definition and Limitations of Internal Control Over Financial Reporting

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.

/s/ Ernst & Young LLP

Iselin, New Jersey

February 25, 2025

**ONTO INNOVATION INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(In thousands, except per share data)**

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
Revenue	\$ 987,321	\$ 815,868	\$ 1,005,183
Cost of revenue	472,013	395,614	465,962
Gross profit	515,308	420,254	539,221
Operating expenses:			
Research and development	116,767	104,442	111,953
Sales and marketing	76,155	61,765	65,688
General and administrative	85,846	83,147	69,582
Amortization	49,437	54,822	55,284
Total operating expenses	328,205	304,176	302,507
Operating income	187,103	116,078	236,714
Interest income, net	33,489	20,356	5,011
Other expense, net	(145)	(3,852)	(141)
Income before provision for income taxes	220,447	132,582	241,584
Provision for income taxes	18,777	11,423	18,250
Net income	\$ 201,670	\$ 121,159	\$ 223,334
Earnings per share:			
Basic	\$ 4.09	\$ 2.47	\$ 4.52
Diluted	\$ 4.06	\$ 2.46	\$ 4.49
Weighted average number of shares outstanding:			
Basic	49,343	48,971	49,424
Diluted	49,660	49,318	49,764

The accompanying notes are an integral part of these consolidated financial statements.

**ONTO INNOVATION INC.**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
**(In thousands)**

	<b>Year Ended</b>		
	<b>December 28, 2024</b>	<b>December 30, 2023</b>	<b>December 31, 2022</b>
Net income	\$ 201,670	\$ 121,159	\$ 223,334
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains (losses) on available-for-sale marketable securities	(137)	3,660	(2,447)
Change in currency translation adjustments	(5,827)	(1,549)	(8,879)
Total other comprehensive income (loss), net of tax	(5,964)	2,111	(11,326)
Total comprehensive income	<u>\$ 195,706</u>	<u>\$ 123,270</u>	<u>\$ 212,008</u>

The accompanying notes are an integral part of these consolidated financial statements.

**ONTO INNOVATION INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(In thousands, except per share data)

	December 28, 2024	December 30, 2023
<b>ASSETS</b>		
Current Assets:		
Cash and cash equivalents	\$ 212,945	\$ 233,508
Marketable securities	639,383	464,303
Accounts receivable, less allowance of \$2,585 at December 28, 2024 and \$2,659 at December 30, 2023	308,142	226,556
Inventories	286,979	327,773
Prepaid expenses and other current assets	30,073	31,127
Total current assets	1,477,522	1,283,267
Property, plant and equipment, net	123,868	103,611
Goodwill	329,980	315,811
Identifiable intangible assets, net	127,457	167,375
Deferred income taxes	42,811	18,836
Other assets	15,453	20,812
Total assets	\$ 2,117,091	\$ 1,909,712
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 56,261	\$ 49,869
Accrued liabilities	49,974	42,062
Deferred revenue	33,828	24,763
Other current liabilities	30,026	31,032
Total current liabilities	170,089	147,726
Deferred and other tax liabilities	4	—
Other non-current liabilities	21,116	25,451
Total liabilities	191,209	173,177
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred stock, \$0.001 par value, 3,000 shares authorized, no shares issued and outstanding	—	—
Common stock, \$0.001 par value, 97,000 shares authorized, 49,238 and 49,086 issued and outstanding at December 28, 2024 and December 30, 2023, respectively.	49	49
Additional paid-in capital	1,275,146	1,262,029
Accumulated other comprehensive loss	(13,863)	(7,899)
Accumulated earnings	664,550	482,356
Total stockholders' equity	1,925,882	1,736,535
Total liabilities and stockholders' equity	\$ 2,117,091	\$ 1,909,712

The accompanying notes are an integral part of these consolidated financial statements.

**ONTO INNOVATION INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(In thousands)

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
Cash flows from operating activities:			
Net income	\$ 201,670	\$ 121,159	\$ 223,334
Adjustments to reconcile net income to net cash and cash equivalents provided by operating activities:			
Depreciation	12,872	12,390	9,378
Amortization of intangibles	49,437	54,822	55,284
Share-based compensation	28,577	25,513	24,426
Write-off of acquired in-process research and development	4,168	—	5,652
Provision for inventory valuation	19,187	10,015	9,313
Deferred income taxes	(26,476)	(22,429)	(33,601)
Other, net	722	2,991	(563)
Change in operating assets and liabilities, net of effects of business acquired:			
Accounts receivable	(83,685)	12,151	(65,140)
Income taxes	3,109	1,798	(5,006)
Inventories	19,943	(16,462)	(93,905)
Prepaid expenses and other assets	2,093	(14,013)	(4,954)
Accounts payable	6,225	(4,681)	1,181
Accrued and other liabilities	7,834	(11,281)	11,304
Net cash and cash equivalents provided by operating activities	<u>245,676</u>	<u>171,973</u>	<u>136,703</u>
Cash flows from investing activities:			
Purchases of marketable securities	(708,707)	(480,458)	(371,287)
Proceeds from maturities and sales of marketable securities	540,824	396,844	338,645
Purchases of property, plant and equipment	(31,903)	(22,573)	(18,405)
Proceeds from sale of property, plant and equipment	—	2,800	—
Acquisitions, net of cash acquired	(26,761)	—	(4,644)
Net cash and cash equivalents used in investing activities	<u>(226,547)</u>	<u>(103,387)</u>	<u>(55,691)</u>
Cash flows from financing activities:			
Purchases of common stock	(25,069)	(3,197)	(65,257)
Tax payments related to shares withheld for share-based compensation plans	(19,045)	(10,762)	(8,874)
Payment of contingent consideration for acquired business	(737)	(801)	(2,287)
Issuance of shares through share-based compensation plans	9,178	5,285	8,068
Net cash and cash equivalents used in financing activities	<u>(35,673)</u>	<u>(9,475)</u>	<u>(68,350)</u>
Effect of exchange rate changes on cash and cash equivalents	(4,019)	(1,476)	(6,391)
Net increase in cash and cash equivalents	(20,563)	57,635	6,270
Cash and cash equivalents at beginning of year	233,508	175,872	169,602
Cash and cash equivalents at end of year	<u>\$ 212,945</u>	<u>\$ 233,508</u>	<u>\$ 175,872</u>
Supplemental disclosure of cash flow information:			
Income taxes paid, net	\$ 35,505	\$ 34,104	\$ 58,687

The accompanying notes are an integral part of these consolidated financial statements.

**ONTO INNOVATION INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
**For the years ended December 28, 2024,**  
**December 30, 2023 and December 31, 2022**  
**(In thousands)**

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income / (Loss)	Accumulated Earnings	Total
	Shares	Amount				
Balance at January 1, 2022	49,300	\$ 49	\$ 1,256,179	\$ 1,316	\$ 168,511	\$ 1,426,055
Issuance of shares through share-based compensation plans, net	509	1	8,067	—	—	8,068
Repurchase of common stock	(1,018)	(1)	(36,167)	—	(29,089)	(65,257)
Net income	—	—	—	—	223,334	223,334
Share-based compensation	—	—	24,426	—	—	24,426
Share-based compensation plan withholdings	(107)	—	(8,874)	—	—	(8,874)
Currency translation	—	—	—	(8,879)	—	(8,879)
Unrealized loss on investments	—	—	—	(2,447)	—	(2,447)
Balance at December 31, 2022	48,684	\$ 49	\$ 1,243,631	\$ (10,010)	\$ 362,756	\$ 1,596,426
Issuance of shares through share-based compensation plans, net	573	—	5,285	—	—	5,285
Repurchase of common stock	(46)	—	(1,638)	—	(1,559)	(3,197)
Net income	—	—	—	—	121,159	121,159
Share-based compensation	—	—	25,513	—	—	25,513
Share-based compensation plan withholdings	(125)	—	(10,762)	—	—	(10,762)
Currency translation	—	—	—	(1,549)	—	(1,549)
Unrealized gain on investments	—	—	—	3,660	—	3,660
Balance at December 30, 2023	49,086	\$ 49	\$ 1,262,029	\$ (7,899)	\$ 482,356	\$ 1,736,535
Issuance of shares through share-based compensation plans, net	411	—	9,178	—	—	9,178
Repurchase of common stock	(157)	—	(5,593)	—	(19,476)	(25,069)
Net income	—	—	—	—	201,670	201,670
Share-based compensation	—	—	28,577	—	—	28,577
Share-based compensation plan withholdings	(102)	—	(19,045)	—	—	(19,045)
Currency translation	—	—	—	(5,827)	—	(5,827)
Unrealized loss on investments	—	—	—	(137)	—	(137)
Balance at December 28, 2024	49,238	\$ 49	\$ 1,275,146	\$ (13,863)	\$ 664,550	\$ 1,925,882

The accompanying notes are an integral part of these consolidated financial statements

**ONTO INNOVATION INC.  
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**1. Organization and Nature of Operations:**

Onto Innovation Inc. (“Onto Innovation” or the “Company”) is a worldwide leader in the design, development, manufacture and support of process control tools that perform macro-defect inspection and metrology, lithography systems, and process control analytical software used by semiconductor and advanced packaging device manufacturers. The Company delivers comprehensive solutions throughout the semiconductor fabrication process with our families of proprietary products that provide critical yield-enhancing information, enabling microelectronic device manufacturers to drive down costs and time to market of their devices. The Company provides process and yield management solutions used in both wafer processing facilities, often referred to as “front-end” manufacturing, and in device packaging and test facilities, commonly referred to as “back-end” manufacturing. The Company’s advanced process control software portfolio includes powerful solutions for standalone tools, groups of tools, or factory-wide suites to enhance productivity and achieve significant cost savings. Onto Innovation’s systems are backed by worldwide customer service and applications support. The Company has branch sales and service offices or subsidiaries in Korea, Japan, China, Taiwan, Singapore, Malaysia, Vietnam and in several countries in Europe. The Company operates in a single reportable segment and is a provider of process characterization equipment and software for wafer fabs and advanced packaging facilities.

**2. Summary of Significant Accounting Policies:**

**Consolidation.** The consolidated financial statements reflect the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

**Fiscal Year.** The Company operates on a 52- or 53-week fiscal year ending on the Saturday closest to December 31. The fiscal year of 2024 was a 52-week fiscal year that began on December 31, 2023 and ended December 28, 2024. The fiscal year of 2023 was a 52-week fiscal year that began on January 1, 2023 and ended December 30, 2023. The fiscal year of 2022 was a 52-week fiscal year that began on January 2, 2022 and ended December 31, 2022.

**Segment Reporting.** The Company is organized and operates as one reportable segment, the design, development, manufacture and support of high-performance control metrology, defect inspection, lithography and data analysis systems used by microelectronics device manufacturers. The Company’s chief operating decision maker, the Chief Executive Officer, reviews financial information presented on a consolidated basis for purposes of making operating decisions and assessing financial performance.

For additional information on the Company’s segment reporting, see Note 15 of Notes to the Consolidated Financial Statements.

**Revenue Recognition.** Revenue is recognized when control of the promised goods or services is transferred to the Company’s customers in an amount that reflects the consideration the Company expects to be entitled to receive in exchange for those goods or services. The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties and payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

The Company accounts for shipping and handling activities as the fulfillment of a promise to transfer goods to the customer and therefore records these activities under the caption “Cost of revenue.” Sales tax and any other taxes collected concurrent with revenue producing activities are excluded from revenue. Incidental items that are immaterial in the context of the contract are recognized as expense.

Contracts with customers may include multiple performance obligations. For such arrangements, the Company allocates revenue to each performance obligation based on its relative standalone selling price. The Company generally determines standalone selling prices based on the prices charged to customers or the expected cost-plus margin.

*Systems and Software Revenue*

Revenue from systems is recognized when the Company transfers control of the product to the customer. To indicate transfer of control, the Company must have a present right to payment, legal title must have passed to the customer and the customer must have the significant risks and rewards of ownership. The Company generally transfers control for system sales when the customer or the customer’s agent picks up the system at the Company’s facility. The Company provides an assurance warranty on its systems for a period of twelve to fourteen months against defects in material and workmanship. The Company provides for the estimated cost of product warranties at the time revenue is recognized.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

Depending on the terms of the systems arrangement, the Company may also defer the recognition of a portion of the consideration expected to be received because the Company has to satisfy a future obligation (e.g., installation and extended warranties). The Company uses an observable price to determine the standalone selling price for separate performance obligations or a cost-plus margin approach when one is not available.

Revenue from software licenses provides the customer with a right to use the software as it exists when made available to the customer. Revenue from software licenses, which is primarily sold with our systems, is recognized upfront at the point in time when the software is made available to the customer. Revenue from licensing support and maintenance is recognized as the support and maintenance are provided, which is over the contract period.

*Parts Revenue*

Revenue from parts is recognized when the Company transfers control of the product, which typically occurs when the Company ships the product from its facilities to the customer.

*Services Revenue*

Revenue from services primarily consists of service contracts, which provide additional maintenance coverage beyond the Company's assurance warranty on its products, service labor, consulting and training. Revenue from service contracts is recognized ratably over the term of the service contract. Revenue from service labor and consulting is recognized as services are performed. Revenue from installation services is recognized at a point in time when installation is complete.

*Practical Expedients*

The Company generally expenses sales commissions when incurred because the amortization period is one year or less. These costs are recorded within selling, general and administrative expenses.

The Company does not adjust the amount of consideration for the effects of a significant financing components, if any, as the payment terms are one year or less.

The Company does not disclose the value of remaining performance obligations for contracts with an original expected length of one year or less and contracts for which the Company recognizes revenue in the amount to which it has the right to invoice.

For additional information on the Company's revenue recognition, see Note 10 of Notes to the Consolidated Financial Statements.

**Business Combinations.** The Company accounts for business combinations under the acquisition method of accounting, which requires us to recognize separately from goodwill the assets acquired, and the liabilities assumed at their acquisition date fair values. While the Company uses its best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, the Company's estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recognized in its consolidated statements of operations. Accounting for business combinations requires the Company's management to make significant estimates and assumptions, especially at the acquisition date including its estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies, and contingent consideration, where applicable. Although the Company believes the assumptions and estimates it has made in the past have been reasonable and appropriate, they are based, in part, on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Estimates in valuing certain acquired intangible assets under the income approach include growth in future expected cash flows from product sales, acquired technologies, technology obsolescence rates, estimated cash flows from the projects when completed and discount rates. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

For additional information on the Company's business combinations, see Note 3 of these Notes to the Consolidated Financial Statements.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**Use of Estimates.** 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 reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant estimates made by management include the allowance for credit losses, excess and obsolete inventory, fair value of assets acquired and liabilities assumed in a business combination, recoverability and useful lives of property, plant and equipment and identifiable intangible assets, recoverability of goodwill, recoverability of deferred tax assets, liabilities for product warranty, contingencies, including litigation reserves and share-based payments and liabilities for tax uncertainties. Actual results could differ from those estimates.

These estimates and assumptions are based on historical experience and on various other factors which the Company believes to be reasonable under the circumstances. The Company may engage third-party valuation specialists to assist with estimates related to the valuation of financial instruments, assets and stock awards associated with various contractual arrangements, goodwill and identifiable intangible assets. Such estimates often require the selection of appropriate valuation methodologies and significant judgment. Actual results could differ from these estimates under different assumptions or circumstances and such differences could be material.

**Cash and Cash Equivalents.** Cash and cash equivalents include cash and highly liquid debt instruments with original maturities of three months or less when purchased.

**Marketable Securities.** The Company determined that its investment securities are to be classified as available-for-sale. Available-for-sale debt securities are carried at fair value, with the unrealized gains and losses reported in stockholders' equity under the caption "Accumulated other comprehensive loss." Realized gains and losses and, interest and dividends on available-for-sale securities are included in interest income and other, net. Available-for-sale securities are classified as current assets regardless of their maturity date if they are available for use in current operations. The Company reviews its investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, credit quality and the Company's ability and intent to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value. When a decline in fair value is determined to be other-than-temporary, unrealized losses on available-for-sale securities are charged against earnings. The specific identification method is used to determine the gains and losses on marketable securities.

For additional information on the Company's marketable securities, see Note 5 of Notes to the Consolidated Financial Statements.

**Allowance for Credit Losses.** The Company maintains an allowance for credit losses that is estimated based on a combination of factors including write-off history, aging analysis, forecast of future economic conditions and any specific known troubled accounts. The Company believes the allowance is adequate to cover expected losses on trade receivables. Provisions for expected credit losses are classified as selling, general and administrative expense in the Consolidated Statements of Operations. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

**Inventories.** Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less predictable costs of completion, disposal and transportation. Cost is generally determined on a first-in, first-out basis, and includes material, labor and manufacturing overhead costs. The Company reviews and sets standard costs as needed, but at a minimum, on an annual basis, at current manufacturing costs in order to approximate actual costs.

The Company evaluates inventories for excess quantities and obsolescence. The Company establishes inventory reserves when conditions exist that suggest that inventory may be in excess of anticipated demand or is obsolete based upon assumptions about historical and future demand for the Company's products and market conditions. In addition, inventories are evaluated for potential obsolescence due to the effect of known and anticipated engineering design changes. Once a reserve has been established, it is maintained until the item to which it relates is scrapped or sold. The Company regularly evaluates its ability to realize the value of inventory based on a combination of factors including the following: historical usage rates, forecasted sales, product end-of-life dates, estimated current and future market values and new product introductions. When recorded, reserves are intended to reduce the carrying value of the Company's inventory to its net realizable value. If actual demand for

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

the Company's products deteriorates, or market conditions are less favorable than those that the Company projects, additional reserves may be required.

**Property, Plant and Equipment.** Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the assets, which are five to twenty-two years for buildings, three to ten years for machinery and equipment, three to ten years for furniture and fixtures, three years for computer equipment, and three to seven years for software. Leasehold improvements are amortized using the straight-line method over the lesser of the lease term or the estimated useful life of the related asset. Repairs and maintenance costs are expensed as incurred and major renewals and betterments are capitalized.

**Long-Lived Assets and Finite-Lived Acquired Intangible Assets.** Long-lived assets, such as property, plant, and equipment, and identifiable acquired intangible assets with finite useful lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset, which is generally based on discounted cash flows.

**Goodwill and Indefinite Lived Intangible Assets.** Goodwill and indefinite lived intangible assets are tested for impairment on an annual basis or when an event or changes in circumstances indicate that its carrying value may not be recoverable. Goodwill impairment is tested at the reporting unit level, which is defined as an operating segment or one level below the operating segment. The Company has three reporting units and one operating segment. No goodwill impairment occurred in fiscal years 2024, 2023, or 2022. Goodwill is reviewed for impairment using either a qualitative assessment or a quantitative goodwill impairment test. If the Company chooses to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. When the Company performs the quantitative goodwill impairment test, it compares fair value to carrying value, which includes goodwill. If fair value exceeds carrying value, the goodwill is not considered impaired. If the carrying value is higher than the fair value, the difference would be recognized as an impairment loss.

Intangible assets with indefinite lives, including in-process research and development ("IPR&D"), are tested for impairment if impairment indicators arise and, at a minimum, annually. However, the Company is permitted to first assess qualitative factors to determine if a quantitative impairment test is necessary. Further testing is only required if the entity determines, based on the qualitative assessment, that it is more likely than not that an indefinite-lived intangible asset's fair value is less than its carrying amount. Otherwise, no further impairment testing is required. The indefinite-lived intangible asset impairment test consists of a one-step analysis that compares the fair value of the intangible asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. We consider many factors in evaluating whether the value of intangible assets with indefinite lives may not be recoverable, including, but not limited to estimates of future cash flows, the discount rate, terminal growth rates, general economic conditions, our outlook and market performance of our industry and recent and forecasted financial performance.

For additional information on the Company's goodwill and purchased intangible assets, see Note 6 of Notes to the Consolidated Financial Statements.

**Concentration of Credit Risk.** Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of accounts receivable, cash and cash equivalents and marketable securities.

The Company maintains cash and cash equivalents and marketable securities with higher credit quality issuers and monitors the amount of credit exposure to any one issuer. The Company's investment policy provides guidelines and limits regarding credit quality, investment concentration, investment type, and maturity that the Company believes will provide liquidity while reducing risk of loss of capital. Investments are of a short-term nature and include investments in commercial paper, corporate debt securities, asset-backed securities, U.S. Treasury, U.S. Government, and U.S. Agency debt.

The Company's accounts receivable result primarily from the sale of semiconductor equipment, related accessories and replacement parts. The Company's customer base is highly concentrated and historically, a relatively small number of customers have accounted for a significant portion of its revenues. Write-offs of uncollectible accounts have historically not been material. The Company actively monitors its customers' financial strength to reduce the risk of loss.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**Warranties.** The Company generally provides a warranty on its products for a period of twelve to fourteen months against defects in material and workmanship. The Company provides for the estimated cost of product warranties at the time revenue is recognized. The estimated future warranty obligations are affected by the warranty periods, sales volumes, product failure rates, material usage and labor and replacement costs incurred in correcting a product failure. If actual product failure rates, material usage, labor or replacement costs differ from the Company's estimates, revisions to the estimated warranty obligations would be required. The warranty accrual represents the best estimate of the amount necessary to settle future and existing claims on products sold as of the balance sheet date. The Company periodically assesses the adequacy of its recorded warranty reserve and adjusts the amounts in accordance with changes in these factors.

**Income Taxes.** The Company accounts for income taxes using the asset and liability approach for deferred taxes which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. A valuation allowance is recorded to reduce a deferred tax asset to that portion which more likely than not will be realized.

For additional information on the Company's income taxes, see Note 13 of Notes to the Consolidated Financial Statements.

**Translation of Foreign Currencies.** The Company's international branches and subsidiaries primarily generate and expend cash in their local functional currency. Accordingly, all balance sheet accounts of these local functional currency branches and subsidiaries are translated into U.S. dollars at the fiscal period-end exchange rate, and income and expense accounts are translated into U.S. dollars using average rates in effect for the period. The resulting translation adjustments are recorded as cumulative translation adjustments and are recorded directly as a separate component of stockholders' equity under the caption, "Accumulated other comprehensive loss." The Company had accumulated exchange losses resulting from the translation of foreign operation financial statements of \$14.5 million and \$8.7 million as of December 28, 2024 and December 30, 2023, respectively.

**Share-based Compensation.** The Company measures the cost of employee services received in exchange for the award of equity instruments based on the fair value of the award at the date of grant. Compensation expense is recognized using the straight-line attribution method to recognize share-based compensation over the service period of the award, with adjustments recorded for forfeitures as they occur.

For additional information on the Company's share-based compensation plans, see Note 11 of Notes to the Consolidated Financial Statements.

**Research and Development Costs.** Expenditures for research and development are expensed as incurred.

**Derivative Instruments and Hedging Activities.** The Company's policy is to mitigate the effect of exchange rate fluctuations on certain foreign currency denominated business exposures. The Company has a policy that allows for the use of derivative financial instruments to hedge foreign currency exchange rate fluctuations on forecasted revenue and net monetary assets or liabilities denominated in various foreign currencies. The Company carries derivative financial instruments (derivatives) on the balance sheet at their fair values, in either prepaid expenses and other current assets or other current liabilities in the Consolidated Balance Sheets. The Company does not use derivatives for trading or speculative purposes. The Company does not believe that it is exposed to more than a nominal amount of credit risk in its foreign currency hedges, as counterparties are large, global and well-capitalized financial institutions. The Company's exposures are in liquid currencies (Japanese yen, euros, Korean won, Taiwanese dollars, Chinese renminbi and Singapore dollars), so there is minimal risk that appropriate derivatives to maintain the Company's hedging program would not be available in the future.

To hedge foreign currency risks, the Company uses foreign currency exchange forward contracts, where possible and prudent. These hedge contracts are valued using standard valuation formulas with assumptions about future foreign currency exchange rates derived from existing exchange rates, interest rates, and other market factors.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The dollar equivalent of the U.S. dollar forward contracts and related fair values as of December 28, 2024 and December 30, 2023 were as follows:

	December 28, 2024	December 30, 2023
Notional amount	\$ 45,883	\$ 51,551
Fair value of (asset) liability	(61)	1,370

During the years ended December 28, 2024 and December 31, 2022, the Company recognized losses of \$1.1 million and \$3.5 million on maturities of forward contracts, respectively. During the year ended December 30, 2023, the Company recognized a gain of \$0.3 million on maturities of forward contracts. The aggregate notional amounts of matured contracts were \$423.4 million, \$319.4 million and \$366.0 million for 2024, 2023 and 2022, respectively.

**Contingencies and Litigation.** The Company is subject to the possibility of losses from various contingencies, including certain legal proceedings, lawsuits and other claims. The Company accrues for a loss contingency when it concludes that the likelihood of a loss is probable and the amount of the loss can be reasonably estimated. If the Company concludes that loss contingencies that could be material to any one of its financial statements are not probable, but are reasonably possible, or are probable, but cannot be estimated, then the Company discloses the nature of the loss contingencies, together with an estimate of the range of possible loss or a statement that such loss is not reasonably estimable. The Company expenses as incurred the costs of defending legal claims against the Company. The Company does not recognize gain contingencies until realized. See Note 9 of the Notes to the Consolidated Financial Statements, “Commitments and Contingencies” for a detailed description.

**Recent Accounting Pronouncements.**

*Recently Adopted or Effective*

In November 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-07, “Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures,” which expands disclosures about a public entity’s reportable segments and requires more enhanced information about a reportable segment’s expenses, interim segment profit or loss, and how a public entity’s chief operating decision maker uses reported segment profit or loss information in assessing segment performance and allocating resources. The guidance is effective for financial statements issued for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is required to adopt this standard in the fiscal year 2024 for the annual reporting period ending December 28, 2024, with retrospective disclosure of prior periods presented. The Company adopted the new standard in fiscal year 2024 for annual and retrospective reporting periods with all interim disclosures to begin in the first quarter of fiscal year 2025. Refer to Note 15 for additional discussion regarding the Company’s segment reporting.

*Updates Not Yet Effective*

In December 2023, the FASB issued ASU 2023-09, “Income Taxes (Topic 740): Improvements to Income Tax Disclosures,” which requires public entities to disclose consistent categories and greater disaggregation of information in the rate reconciliation and for income taxes paid. It also includes certain other amendments to improve the effectiveness of income tax disclosures. The guidance is effective for financial statements issued for annual periods beginning after December 15, 2024, with early adoption permitted. The Company is required to adopt this standard prospectively in fiscal year 2025 for the annual reporting period ending January 3, 2026. The Company does not expect the amendment to have a material impact on its Consolidated Financial Statements upon adoption.

In November 2024, the FASB issued ASU 2024-03, “Income Statement – Reporting Comprehensive Income – Expense Disaggregation Disclosures” (Subtopic 220-40) which requires additional disclosure of certain costs and expenses, including inventory purchases, employee compensation, selling expense and depreciation expense within the notes to financial statements. The guidance is effective for annual periods beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027, with early adoption permitted. The Company is currently evaluating the impact that the updated standard will have on its financial statements and related disclosures.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**3. Business Combination:**

*Lumina Instruments Inc.*

During the fourth quarter of 2024, the Company acquired Lumina Instruments Inc. (“Lumina”), to strengthen Onto Innovation’s inspection portfolio through the addition of Lumina’s highly differentiated laser based optical defect inspection technology. The Company paid \$25.0 million in cash to acquire Lumina.

The acquisition has been accounted for using the acquisition method of accounting in accordance with FASB Accounting Standards Codification (“ASC”) Topic 805, “Business Combinations.” Under the acquisition method of accounting, the total purchase consideration of the acquisition is allocated to the tangible assets and identifiable intangible assets acquired based on their relative fair values. The excess of the purchase consideration over the net tangible and identifiable intangible assets is recorded as goodwill, the amount of which represents the expected benefits to the Company of future technology and the knowledgeable and experienced employees who joined the Company.

The following table summarizes the purchase consideration and estimated fair values of the assets acquired and liabilities assumed:

	<u>At Acquisition Date</u>
	<u>(in thousands)</u>
Cash and cash equivalents	\$ 1,566
Accounts receivable	333
Inventories	908
Prepaid expenses and other current assets	14
Identifiable intangible assets	9,420
Total assets acquired	12,241
Accounts payable	(26)
Accrued liabilities	(77)
Deferred tax liabilities	(1,307)
Net assets acquired	10,831
Goodwill	14,169
Total purchase consideration	<u>\$ 25,000</u>

**4. Fair Value Measurements:**

*Fair Value of Financial Instruments*

The Company has evaluated the estimated fair value of financial instruments using available market information and valuations as provided by third-party sources. The use of different market assumptions and/or estimation methodologies could have a significant effect on the estimated fair value amounts. The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair value because of the short-term maturity of these instruments.

*Fair Value Hierarchy*

The Company applies a three-level valuation hierarchy for fair value measurements. This hierarchy prioritizes the inputs into three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the asset or liability. Level 3 inputs are unobservable inputs based on management’s assumptions used to measure assets and liabilities at fair value. A financial asset’s or liability’s fair value measurement classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table provides the assets and liabilities carried at fair value measured on a recurring basis at December 28, 2024 and December 30, 2023:

	Fair Value Measurements Using Significant Other Observable Inputs (Level 2)	
	December 28, 2024	December 30, 2023
	(in thousands)	
<b>Assets:</b>		
Available-for-sale debt securities:		
Government notes and bonds	\$ 284,863	\$ 195,800
Certificates of deposit	73,421	67,467
Commercial paper	136,557	99,635
Corporate bonds	144,542	101,401
Foreign currency forward contracts	61	—
Total assets	<u>\$ 639,444</u>	<u>\$ 464,303</u>
<b>Liabilities:</b>		
Foreign currency forward contracts	—	\$ 1,370
Total liabilities	<u>\$ —</u>	<u>\$ 1,370</u>

Available-for-sale debt securities classified as Level 2 are valued using observable inputs to quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency. The foreign currency forward contracts are primarily measured based on the foreign currency spot and forward rates quoted by the banks or foreign currency dealers. Investment prices are obtained from third party pricing providers, which model prices utilizing the above observable inputs, for each asset class.

See Note 5 for additional discussion regarding the fair value of the Company's marketable securities.

**5. Marketable Securities:**

At December 28, 2024 and December 30, 2023, marketable securities are categorized as follows:

	Amortized Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Fair Value
	(in thousands)			
<b>December 28, 2024</b>				
Government notes and bonds	\$ 284,763	\$ 387	\$ 287	\$ 284,863
Certificates of deposit	73,390	49	18	73,421
Commercial paper	136,496	103	42	136,557
Corporate bonds	144,331	283	72	144,542
Total marketable securities	<u>\$ 638,980</u>	<u>\$ 822</u>	<u>\$ 419</u>	<u>\$ 639,383</u>
<b>December 30, 2023</b>				
Government notes and bonds	\$ 195,733	\$ 393	\$ 326	\$ 195,800
Certificates of deposit	67,377	93	3	67,467
Commercial paper	99,591	54	10	99,635
Corporate bonds	101,146	391	136	101,401
Total marketable securities	<u>\$ 463,847</u>	<u>\$ 931</u>	<u>\$ 475</u>	<u>\$ 464,303</u>

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The amortized cost and estimated fair value of marketable securities classified by the maturity date listed on the security, regardless of the Consolidated Balance Sheet classification, is as follows at December 28, 2024 and December 30, 2023:

	December 28, 2024		December 30, 2023	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
	(in thousands)			
Due within one year	\$ 432,088	\$ 432,616	\$ 331,136	\$ 330,937
Due after one through five years	140,917	140,792	132,711	133,366
Due after five through ten years	235	235	—	—
Due after ten years	65,740	65,740	—	—
Total marketable securities	\$ 638,980	\$ 639,383	\$ 463,847	\$ 464,303

The following table summarizes the estimated fair value and gross unrealized holding losses of marketable securities, aggregated by investment instrument and period of time in an unrealized loss position, at December 28, 2024 and December 30, 2023.

	In Unrealized Loss Position For Less Than 12 Months		In Unrealized Loss Position For Greater Than 12 Months	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(in thousands)			
<b>December 28, 2024</b>				
Government notes and bonds	\$ 37,636	\$ 287	\$ —	\$ —
Certificates of deposit	8,260	18	—	—
Commercial paper	18,317	42	—	—
Corporate bonds	13,260	71	3,200	1
Total marketable securities	\$ 77,473	\$ 418	\$ 3,200	\$ 1
<b>December 30, 2023</b>				
Government notes and bonds	\$ 82,776	\$ 325	\$ 180	\$ 1
Certificates of deposit	11,839	3	—	—
Commercial paper	20,121	10	—	—
Corporate bonds	20,268	103	5,999	33
Total marketable securities	\$ 135,004	\$ 441	\$ 6,179	\$ 34

See Note 4 for additional discussion regarding the fair value of the Company's marketable securities.

**6. Goodwill and Purchased Intangible Assets:**

Goodwill and purchased intangible assets with indefinite useful lives are not amortized but are reviewed for impairment annually during the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The process of evaluating the potential impairment of goodwill and intangible assets requires significant judgment. The Company regularly monitors current business conditions and considers other factors including, but not limited to, adverse industry or economic trends, restructuring actions and lower projections of profitability that may impact future operating results. The Company performed its annual assessment in the fourth quarter of fiscal 2024 and concluded that no impairment charge was required.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

*Goodwill*

The changes in the carrying amount of goodwill are as follows:

	Year Ended	
	December 28, 2024	December 30, 2023
	(in thousands)	
Balance, beginning of the period	\$ 315,811	\$ 315,811
Acquired business	14,169	—
Balance, end of the period	<u>\$ 329,980</u>	<u>\$ 315,811</u>

The \$14.2 million of goodwill acquired in 2024 resulted from the purchase of Lumina Instruments, Inc. See Note 3, “Business Combination,” for further details.

*Purchased Intangible Assets*

Purchased intangible assets as of December 28, 2024 and December 30, 2023 are as follows:

	Gross Carrying Amount	Accumulated Amortization (in thousands)	Net
<b>December 28, 2024</b>			
Finite-lived intangible assets:			
Developed technology	\$ 387,716	\$ 298,013	\$ 89,703
Customer and distributor relationships	73,321	39,370	33,951
Trademarks and trade names	14,171	10,368	3,803
Total identifiable intangible assets	<u>\$ 475,208</u>	<u>\$ 347,751</u>	<u>\$ 127,457</u>
<b>December 30, 2023</b>			
Finite-lived intangible assets:			
Developed technology	\$ 378,197	\$ 254,350	\$ 123,847
Customer and distributor relationships	73,321	34,782	38,539
Trademarks and trade names	14,171	9,182	4,989
Total identifiable intangible assets	<u>\$ 465,689</u>	<u>\$ 298,314</u>	<u>\$ 167,375</u>

Intangible asset amortization expense amounted to \$49.4 million, \$54.8 million and \$55.3 million for the years ended December 28, 2024, December 30, 2023 and December 31, 2022, respectively. Assuming no change in the gross carrying value of identifiable intangible assets and estimated lives, estimated amortization expenses are \$33.8 million for 2025, \$32.6 million for 2026, \$24.4 million for 2027, \$13.5 million for 2028, and \$6.2 million for 2029.

**7. Leasing Arrangements:**

The Company determines if an arrangement is a lease at its inception. Operating lease arrangements are comprised primarily of real estate and equipment agreements for which the right-of-use assets are included in “Other assets” and the corresponding lease liabilities, depending on their maturity, are included in “Other current liabilities” or “Other non-current liabilities” in the Consolidated Balance Sheets.

Right-of-use assets represent the right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Right-of-use assets and lease liabilities are recognized at the lease commencement date based on the estimated present value of lease payments over the lease term. The lease term includes options to extend the lease when it is reasonably certain that the option will be exercised. Lease agreements frequently require the Company to pay real estate taxes, insurance and maintenance costs. Leases with a term of one year or less are not recorded on the Consolidated Balance Sheets and lease expense for these leases is recognized on a straight-line basis over the lease term.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

Lease costs for operating leases were \$6.4 million and \$6.5 million for the years ended December 28, 2024 and December 30, 2023, respectively. Operating lease costs are generally recognized over the lease term.

The Company uses its estimated incremental borrowing rate in determining the present value of lease payments considering the term of the lease, which is derived from information available at the lease commencement date, giving consideration to publicly available data for instruments with similar characteristics. The Company accounts for the lease and non-lease components as a single lease component.

<b>Lease term and discount rate</b>	<b>December 28, 2024</b>	<b>December 30, 2023</b>
Weighted average remaining lease term in years	3.5	4.2
Weighted average discount rate	5.1 %	4.7 %

Supplemental cash flows information related to leases was as follows:

	<b>Year Ended</b>	
	<b>December 28, 2024</b>	<b>December 30, 2023</b>
	(in thousands)	
Cash paid for operating lease liabilities	\$ 6,372	\$ 6,527
Right-of-use assets obtained in exchange for operating lease liabilities	\$ 1,334	\$ 3,678

As of December 28, 2024, there was an insignificant amount of commitments for operating leases that have not yet commenced. The reconciliation of the maturities of operating leases to the lease liabilities recorded on the Consolidated Balance Sheet as of December 28, 2024 is as follows:

	<b>Operating Lease (in thousands)</b>	
2025	\$	6,095
2026		4,308
2027		2,869
2028		2,447
2029		1,123
Total undiscounted operating lease payments		16,842
Less: imputed interest		1,683
Present value of operating lease liabilities	\$	15,159

**8. Balance Sheet Components:**

*Inventories*

Inventories are comprised of the following:

	<b>December 28, 2024</b>	<b>December 30, 2023</b>
	(in thousands)	
Materials	\$ 176,814	\$ 234,471
Work-in-process	91,672	67,816
Finished goods	18,493	25,486
Total inventories	\$ 286,979	\$ 327,773

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

*Property, Plant and Equipment*

Property, plant and equipment, net, is comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Land and building	\$ 46,583	\$ 47,889
Machinery and equipment	86,317	69,828
Furniture and fixtures	4,081	3,921
Computer equipment and software	32,755	17,790
Leasehold improvements	20,405	22,089
Total property, plant and equipment, gross	190,141	161,517
Accumulated depreciation	(66,273)	(57,906)
Total property, plant and equipment, net	\$ 123,868	\$ 103,611

*Other assets*

Other assets is comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Operating lease right-of-use assets	\$ 13,939	\$ 18,360
Other	1,514	2,452
Total other assets	\$ 15,453	\$ 20,812

*Accrued liabilities*

Accrued liabilities is comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Payroll and related expenses	\$ 39,850	\$ 33,052
Warranty	10,075	8,934
Other	49	76
Total accrued liabilities	\$ 49,974	\$ 42,062

*Other current liabilities*

Other current liabilities is comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Customer deposits	\$ 10,700	\$ 9,972
Current operating lease obligations	5,416	5,494
Income tax payable	8,492	3,210
Accrued professional fees	618	1,751
Other accrued taxes	839	3,570
Other	3,961	7,035
Total other current liabilities	\$ 30,026	\$ 31,032

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

*Other non-current liabilities*

Other non-current liabilities is comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Non-current operating lease obligations	\$ 9,743	\$ 14,027
Unrecognized tax benefits (including interest)	5,489	7,358
Deferred revenue	4,009	2,462
Other	1,875	1,604
<b>Total non-current liabilities</b>	<b>\$ 21,116</b>	<b>\$ 25,451</b>

**9. Commitments and Contingencies:**

*Intellectual Property Indemnification Obligations*

The Company has entered into agreements with customers that include limited intellectual property indemnification obligations that are customary in the industry. These guarantees generally require the Company to compensate the other party for certain damages and costs incurred as a result of third-party intellectual property claims arising from these transactions. The nature of the intellectual property indemnification obligations prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay to its customers. Historically, the Company has not made any indemnification payments under such agreements and no amount has been accrued in the accompanying consolidated financial statements with respect to these indemnification guarantees.

*Warranty Reserves*

The Company generally provides a warranty on its products for a period of 12 to 14 months against defects in material and workmanship. The Company estimates the costs that may be incurred during the warranty period and records a liability in the amount of such costs at the time revenue is recognized. The Company's estimate is based primarily on historical experience. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. Settlements of warranty reserves are generally associated with sales that occurred during the 12 to 14 months prior to the year-end and warranty accruals are related to sales during the same year.

Changes in the Company's warranty reserves are as follows:

	Year Ended	
	December 28, 2024	December 30, 2023
	(in thousands)	
Balance, beginning of the period	\$ 9,380	\$ 11,830
Accruals	12,348	9,505
Usage	(10,870)	(11,955)
Balance, end of the period	<b>\$ 10,858</b>	<b>\$ 9,380</b>

Warranty reserves are reported in the Consolidated Balance Sheets under the captions "Accrued liabilities" and "Other non-current liabilities."

*Legal Matters*

From time to time, the Company is subject to legal proceedings and claims in the ordinary course of business. We do not believe that any current legal matters will have a material adverse effect on our financial position, results of operations or cash flows.

*Open and Committed Purchase Orders*

As of December 28, 2024, the Company has open and committed purchase orders of \$438.2 million, of which \$243.9 million is for less than one year.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

*Line of Credit*

The Company has a credit agreement with a bank that provides for a variable-rate line of credit which is secured by the marketable securities the Company has with the bank. The Company is permitted to borrow up to 70% of the value of eligible securities held at the time the line of credit is accessed, up to a maximum of \$100 million. The available line of credit as of December 28, 2024 was approximately \$100 million with an available interest rate of 6.2%. The credit agreement is available to the Company until such time that either party terminates the arrangement at their discretion. As of the date of this filing, the Company has not utilized the line of credit.

**10. Revenue**

The following table represents a disaggregation of revenue by timing of revenue:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Point-in-time	\$ 927,368	\$ 761,797	\$ 958,409
Over-time	59,953	54,071	46,773
<b>Total revenue</b>	<b>\$ 987,321</b>	<b>\$ 815,868</b>	<b>\$ 1,005,183</b>

See Note 15 of the Notes to the Consolidated Financial Statements for additional discussion of the Company's disaggregated revenue in detail.

*Contract Assets and Contract Liabilities*

Contract assets consist of amounts we have not invoiced but have completed the related performance obligation. These amounts generally arise from variances between the contractual payment terms and the transaction price assigned to the open performance obligations (e.g., we have recognized revenue in an amount greater than the amount that is billable under the contract). The contract assets amounts are recorded in "Accounts receivable" in the Consolidated Balance Sheets. As of December 28, 2024 and December 30, 2023, the Company had contract assets of \$10.1 million and \$8.0 million, respectively.

The Company records contract liabilities when the customer has been billed in advance of the Company completing its performance obligations primarily with respect to liabilities related to service contracts and installation. For contracts that have a duration of one year or less, these amounts are recorded as "Deferred revenue" in the Consolidated Balance Sheets. For contracts with a duration longer than one year, these amounts are recorded in "Other non-current liabilities" in the Consolidated Balance Sheets. As of December 28, 2024 and December 30, 2023, the Company carried a long-term deferred revenue balance of \$4.0 million and \$2.5 million, respectively.

Changes in deferred revenue were as follows:

	Year Ended	
	December 28, 2024	December 30, 2023
	(in thousands)	
Balance, beginning of the period	\$ 27,225	\$ 33,014
Deferral of revenue	76,584	75,602
Recognition of current year deferred revenue	(48,711)	(55,825)
Recognition of prior period deferred revenue	(17,262)	(25,566)
<b>Balance, ending of the period</b>	<b>\$ 37,836</b>	<b>\$ 27,225</b>

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**11. Share-Based Compensation and Employee Benefit Plans:**

*Share-Based Compensation Plans*

The Company’s share-based compensation plans are intended to attract and retain employees and to provide an incentive for them to assist the Company to achieve long-range performance goals and to enable them to participate in long-term growth of the Company. The Company settles restricted stock unit awards, employee stock purchase option exercises and stock option exercises with newly issued common shares.

*Onto Innovation Inc. 2020 Stock Plan, as amended and restated (the “2020 Plan”).* The 2020 Plan provides for the grant of 3.7 million stock options and other stock awards to employees, directors and consultants at an exercise price equal to the fair market value of the common stock on the date of grant. Options granted under the 2020 Plan typically grade vest over a three-year period and expire ten years from the date of grant. Restricted stock units granted under the 2020 Plan typically vest over a three-year period for employees and one year for directors; however, other vesting periods are allowable under the 2020 Plan. Restricted stock units (“RSUs”) granted to employees have time based or performance-based vesting. As of December 28, 2024, there were 2.7 million shares of common stock available for issuance pursuant to future grants under the 2020 Plan.

*Onto Innovation Inc. 2020 Employee Stock Purchase Plan (the “2020 ESPP”).* Under the terms of the 2020 ESPP, eligible employees may have up to 10% of eligible compensation deducted from their pay and applied to the purchase of shares of Company common stock. The price the employee pays for each share of stock is 85% of the lesser of the fair market value of Company common stock at the beginning or the end of the applicable six-month purchase period. The 2020 ESPP is intended to qualify under Section 423 of the Internal Revenue Code and is a compensatory plan as defined by FASB ASC Topic 718, “Stock Compensation.” Through the Company’s employee stock purchase plans, employees purchased 83 thousand, 91 thousand and 142 thousand shares during the twelve months ended December 28, 2024, December 30, 2023 and December 31, 2022, respectively. As of December 28, 2024 and December 30, 2023, there were 0.9 million and 1.0 million, shares available for issuance under the Company’s employee stock purchase plan, respectively.

Share-based compensation was allocated in the Company’s Consolidated Statement of Operations as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Cost of revenue	\$ 4,771	\$ 4,405	\$ 4,271
Research and development	5,499	6,072	6,068
Sales and marketing	5,606	4,859	4,233
General and administrative	12,702	10,176	9,854
Total share-based compensation expense before income taxes	28,577	25,513	24,426
Income tax benefit	6,209	5,497	5,237
Total share-based compensation expense, net of income taxes	\$ 22,368	\$ 20,016	\$ 19,189

*Restricted Stock Units*

During fiscal years 2024, 2023 and 2022, the Company issued both service-based RSUs and market-based performance RSUs (“PRSUs”). Service-based RSUs typically vest over a period of 3 years or less. Market-based PRSUs generally vest three years from the grant date if certain performance criteria are achieved and require continued employment. Based upon the terms of such awards, the number of shares that can be earned over the performance periods is based on the Company’s common stock price performance compared to the market price performance of a designated benchmark index, ranging from 0% to 200% of target. The designated benchmark index was the Philadelphia Semiconductor Sector Index for market-based PRSUs issued in 2024, 2023 and 2022. The stock price performance or market price performance is measured using the closing price for the 20-trading days prior to the dates the performance period begins and ends.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table summarizes the Company's combined service-based RSUs and market-based PRSUs:

	Number of Shares (in thousands)	Weighted Average Grant Date Fair Value
Nonvested at January 1, 2022	765	\$ 48.25
Granted	410	\$ 82.48
Vested	(373)	\$ 42.87
Forfeited	(59)	\$ 58.98
Nonvested at December 31, 2022	743	\$ 69.01
Granted	319	\$ 89.23
Vested	(415)	\$ 59.20
Forfeited	(63)	\$ 84.11
Nonvested at December 30, 2023	584	\$ 85.41
Granted	171	\$ 191.25
Vested	(329)	\$ 81.10
Forfeited	(17)	\$ 105.31
Nonvested at December 28, 2024	409	\$ 132.39

Of the 409 thousand shares outstanding at December 28, 2024, 327 thousand are service-based RSUs and 82 thousand are market-based PRSUs. The fair value of the Company's service-based RSUs was calculated based on the fair market value of the Company's stock at the date of grant. The fair value of the Company's market-based PRSUs granted during fiscal years 2024, 2023, and 2022 was calculated using a Monte Carlo simulation model at the date of the grant, resulting in a weighted average grant-date fair value per share of \$251.51, \$100.79, and \$85.49, respectively.

As of December 28, 2024, there was \$29.2 million of total unrecognized compensation cost related to RSUs granted under the plans. That cost is expected to be recognized over a weighted average period of 1.3 years.

*401(k) Savings Plan*

The Company has a 401(k) savings plan that allows employees to contribute up to 100% of their annual compensation to the Plan on a pre-tax or after-tax basis, limited to a maximum annual amount as set periodically by the Internal Revenue Service. The plan provides a 50% match of all employee contributions up to 6 percent of the employee's salary. Matching contributions to the plan totaled \$3.2 million, \$3.1 million and \$3.0 million for the years ended December 28, 2024, December 30, 2023 and December 31, 2022, respectively.

**12. Other Expense, Net:**

Other expense, net is comprised of the following:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Foreign currency exchange losses, net	\$ (276)	\$ (4,091)	\$ (73)
Other	131	239	(68)
Total other expense, net	\$ (145)	\$ (3,852)	\$ (141)

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

**13. Income Taxes:**

The components of income tax expense are as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
<b>Current:</b>			
Federal	\$ 40,688	\$ 28,326	\$ 47,963
State	1,156	879	987
Foreign	3,409	4,647	2,901
	<u>45,253</u>	<u>33,852</u>	<u>51,851</u>
<b>Deferred:</b>			
Federal	(25,287)	(22,429)	(31,622)
State	(871)	242	(1,506)
Foreign	(318)	(242)	(473)
	<u>(26,476)</u>	<u>(22,429)</u>	<u>(33,601)</u>
<b>Total income tax expense</b>	<u>\$ 18,777</u>	<u>\$ 11,423</u>	<u>\$ 18,250</u>

The income before tax is comprised of the following:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Domestic operations	\$ 207,747	\$ 107,640	\$ 239,527
Foreign operations	\$ 12,700	\$ 24,942	\$ 2,057

The provision for income taxes differs from the amount of income tax determined by applying the applicable U.S. federal income tax rate of 21% for the years ended December 28, 2024, December 30, 2023 and December 31, 2022, to income before provision for income taxes as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands, except for percentages)		
Federal income tax provision at statutory rate	\$ 46,294	\$ 27,842	\$ 50,732
State taxes, net of federal effect	2,171	1,389	467
Foreign taxes, net of federal effect	854	(2,000)	(481)
Foreign Derived Intangible Income ("FDII") Deduction	(16,960)	(12,662)	(25,445)
US tax on foreign source income	(207)	184	1,423
Tax effect of share-based compensation	(6,883)	(2,288)	(2,497)
Non-deductible officer's compensation	3,412	2,301	1,910
Research and development tax credit	(6,640)	(6,410)	(7,146)
Change in tax reserves	(2,648)	(1,133)	(1,084)
Change in valuation allowance	(1,790)	2,180	(276)
Withholding taxes	785	640	937
Other	389	1,380	(290)
<b>Provision for income taxes</b>	<u>\$ 18,777</u>	<u>\$ 11,423</u>	<u>\$ 18,250</u>
Effective tax rate	9 %	9 %	8 %

Prior year amounts were reclassified to conform to current year classification requirements for comparability purposes. The total tax provision amounts remained unchanged.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

Deferred tax assets and liabilities are comprised of the following:

	December 28, 2024	December 30, 2023
	(in thousands)	
Deferred tax assets:		
Reserves and accruals	\$ 20,315	\$ 16,658
Deferred revenue	4,677	4,082
Share-based compensation	3,792	3,495
Tax credit carryforward	12,170	13,960
Net operating losses	1,618	1,088
Depreciation and amortization	162	156
Capitalized research and development	48,943	34,165
Operating lease liabilities	2,968	3,744
Other	1,162	2,875
Gross deferred tax assets	95,807	80,223
Less: valuation allowance	(12,170)	(13,960)
Total deferred tax assets after valuation allowance	83,637	66,263
Deferred tax liabilities:		
Depreciation and amortization	(38,144)	(43,908)
Operating lease right of use assets	(2,682)	(3,519)
Other	(4)	—
Gross deferred tax liabilities	(40,830)	(47,427)
Net deferred tax assets	\$ 42,807	\$ 18,836

At December 28, 2024 and December 30, 2023, the Company had recorded valuation allowances of \$12.2 million and \$14.0 million, respectively, on a certain portion of the Company's deferred tax assets to reflect the deferred tax assets at the net amount that is more likely than not to be realized. The Company maintains a valuation allowance against its federal foreign tax credit carryforwards of \$0.3 million and state research and development credits of \$11.9 million.

In assessing the realizability of deferred tax assets, the Company uses a more likely than not standard. If it is determined that it is more-likely-than-not that deferred tax assets will not be realized, a valuation allowance must be established against the deferred tax assets. The ultimate realization of the assets is dependent on the generation of future taxable income during the periods in which the associated temporary differences become deductible. Management considers the scheduled reversal of deferred income tax liabilities, projected future taxable income and tax planning strategies when making this assessment. In making the determination that it is more likely than not that the Company's deferred tax assets will be realized as of December 28, 2024, the Company relied primarily on the reversal of deferred tax liabilities as well as projected future taxable income.

At December 28, 2024, the Company had tax effected federal, state, and foreign net operating loss carryforwards of \$0.5 million, \$0.9 million and \$0.2 million, respectively. The federal, state and foreign net operating loss carryforwards expire on various dates beginning in 2033 through 2049.

At December 28, 2024, the Company had foreign tax credit carryforwards and state research & development credits of \$0.3 million, and \$16.8 million, respectively. The foreign tax credit carryforwards are set to expire at various dates beginning December 31, 2032. The state research & development credit carryforwards are set to expire at various dates beginning December 31, 2028.

As of December 28, 2024, the Company has not provided U.S. income taxes on all its foreign earnings. The Company continues to permanently reinvest the cash held offshore to support its working capital needs. The Company has accrued \$0.5 million for additional foreign withholding taxes from an expected liquidating distribution from its Israel entity.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The total amount of unrecognized tax benefits are as follows:

	Year Ended		
	December 28, 2024	December 30, 2023 (in thousands)	December 31, 2022
Balance, beginning of the period	\$ 13,142	\$ 13,010	\$ 12,373
Gross increases—tax positions in prior period	1,416	29	456
Gross decreases—tax positions in prior period	(33)	(100)	—
Gross increases—current-period tax positions	1,761	1,785	1,729
Closure of audit/statute limitation	(3,291)	(1,582)	(1,548)
Balance, end of the period	<u>\$ 12,995</u>	<u>\$ 13,142</u>	<u>\$ 13,010</u>

The unrecognized tax benefits at December 28, 2024 and December 30, 2023 were \$13.0 million and \$13.1 million, respectively, of which \$6.7 million and \$7.2 million, respectively, would be reflected as an adjustment to income tax expense if recognized. The year over year decrease from 2023 to 2024 is primarily due to expiring tax statutes, offset by additional unrecognized tax benefits related to foreign net operating losses. It is reasonably possible that certain amounts of unrecognized tax benefits may reverse in the next 12 months; however, the Company does not expect such reversals to have a significant impact on its results of operations or financial position.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in income tax expense. During the years ended December 28, 2024, December 30, 2023 and December 31, 2022, the Company recognized approximately \$(223) thousand, \$146 thousand and \$149 thousand, respectively, in interest and penalties (benefit) expense associated with uncertain tax positions. As of December 28, 2024 and December 30, 2023, the Company had accrued interest and penalties expense included in the table of unrecognized tax benefits of \$564 thousand and \$823 thousand, respectively.

The Company is subject to U.S. federal income tax as well as income tax in multiple state and foreign jurisdictions. The Company is subject to ordinary statute of limitation rules of three and four years for federal and state returns, respectively. However, due to tax attribute carryforwards, the Company is subject to examination for tax years 2015 forward for U.S. federal tax purposes with respect to carryforward amounts. The Company is also subject to examination in various states for tax years 2003 forward with respect to carryforward amounts. The Company is subject to examination for tax years 2016 forward for various foreign jurisdictions. The Company believes that adequate amounts have been reserved for any adjustments that may ultimately result from any future examinations of these years.

In the normal course of business, the Company is subject to tax audits in various jurisdictions, and such jurisdictions may assess additional income taxes or other taxes against it. Although the Company believes its tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from the Company's historical income tax provisions and accruals. The results of an audit or litigation could have a material adverse effect on the Company's results of operations or cash flows in the period or periods for which that determination is made.

**14. Accumulated Other Comprehensive Income (Loss):**

Comprehensive income includes net income, foreign currency translation adjustments, and net unrealized gains and losses on available-for-sale debt securities. See the Consolidated Statements of Comprehensive Income for the effect of the components of comprehensive income on the Company's net income.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The components of accumulated other comprehensive income (loss), net of tax, are as follows:

	Foreign currency translation adjustments	Net unrealized gains (losses) on marketable securities (in thousands)	Accumulated other comprehensive income (loss)
Balance at January 1, 2022	\$ 1,764	\$ (448)	\$ 1,316
Net current period other comprehensive loss	(8,879)	(2,447)	(11,326)
Balance at December 31, 2022	(7,115)	(2,895)	(10,010)
Net current period other comprehensive income (loss)	(1,549)	3,660	2,111
Balance at December 30, 2023	(8,664)	765	(7,899)
Net current period other comprehensive loss	(5,827)	(137)	(5,964)
Balance at December 28, 2024	<u>\$ (14,491)</u>	<u>\$ 628</u>	<u>\$ (13,863)</u>

For the twelve months ended December 28, 2024, December 30, 2023 and December 31, 2022, tax effects on net income of amounts recorded in other comprehensive income (loss) were \$(36.8) thousand, \$0.9 million and \$(0.7) million, respectively.

**15. Segment Reporting and Geographic Information:**

The Company is organized and operates as one operating and reportable segment; the design, development, manufacture and support of high-performance control metrology, defect inspection, lithography and data analysis systems used by microelectronics device manufacturers. This determination is based on the management approach which designates internal information regularly available to the Chief Operating Decision Maker (“CODM”) for making decisions and assessing performance as the source of determination of the Company’s reportable segments. The Company’s CODM, the Chief Executive Officer, reviews financial information presented on a consolidated basis for the purpose of making operating decisions and assessing financial performance.

The CODM uses net income as the measure of profit or loss to allocate resources and assess performance. The CODM regularly reviews net income as reported on the Company’s consolidated statements of operations. Financial forecasts and budget to actual results used by the CODM to assess performance and allocate resources, as well as those used for strategic decisions related to headcount and capital expenditures are also reviewed on a consolidated basis. The CODM considers the impact of the significant segment expenses in the table below on net income when deciding whether to reinvest profits, propose share repurchase, or pursue strategic mergers and acquisitions.

The measure of segment assets is reported on the balance sheet as total assets. The CODM does not review segment assets at a level other than that presented in the Company’s consolidated balance sheets.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The table below presents the Company's consolidated operating results including significant segment expenses:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Revenue	\$ 987,321	\$ 815,868	\$ 1,005,183
Less:			
Restructuring expenses (1)	23,077	10,599	—
Merger and acquisitions related expenses (2)	7,652	2,607	5,761
Litigation expenses (3)	27	11,337	3,935
Cost of revenue (excluding 1 & 2)	457,855	388,429	465,883
Research and development (excluding 1 & 2)	109,572	103,656	105,648
Sales and marketing (excluding 1 & 2)	75,911	61,604	65,558
General and administrative (excluding 1, 2 & 3)	76,687	66,736	66,400
Amortization	49,437	54,822	55,284
Operating income	187,103	116,078	236,714
Interest income, net	33,489	20,356	5,011
Other expense, net	(145)	(3,852)	(141)
Provision for income taxes	18,777	11,423	18,250
Net income	<u>\$ 201,670</u>	<u>\$ 121,159</u>	<u>\$ 223,334</u>

The following table lists the different sources of revenue:

	Year Ended					
	December 28, 2024		December 30, 2023		December 31, 2022	
	(in thousands, except for percentages)					
Systems and software	\$ 850,443	86 %	\$ 683,316	84 %	\$ 865,707	86 %
Parts	76,584	8 %	74,604	9 %	84,266	8 %
Services	60,294	6 %	57,948	7 %	55,210	6 %
Total revenue	<u>\$ 987,321</u>	<u>100 %</u>	<u>\$ 815,868</u>	<u>100 %</u>	<u>\$ 1,005,183</u>	<u>100 %</u>

The Company's significant operations outside the United States include sales, service and application offices in Asia and Europe. For geographical revenue reporting, revenue is attributed to the geographic location to which the product is shipped. Revenue by geographic region is as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Revenue from third parties:			
Taiwan	\$ 307,538	\$ 141,915	\$ 199,104
South Korea	285,695	169,323	224,172
China	116,387	136,940	250,968
United States	104,109	130,292	121,487
Southeast Asia	64,912	87,585	71,062
Japan	56,999	93,831	58,133
Europe	51,681	55,982	80,256
Total revenue	<u>\$ 987,321</u>	<u>\$ 815,868</u>	<u>\$ 1,005,183</u>

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following customers represented 10% or more of the Company's total revenue for the respective years:

<b>Customer</b>	<b>Year Ended</b>		
	<b>December 28, 2024</b>	<b>December 30, 2023</b>	<b>December 31, 2022</b>
Customer A	23 %	14 %	15 %
Customer B	17 %	19 %	13 %
Customer C	12 %	^	11 %

^ Total customer revenue was less than 10% of total revenue.

Two customers' net accounts receivable balances were individually greater than 10% of net accounts receivable at December 28, 2024, representing, in the aggregate approximately 47% of the Company's total net accounts receivable.

Two customers' net accounts receivable balances were individually greater than 10% of net accounts receivable at December 30, 2023, representing, in the aggregate approximately 29% of the Company's total net accounts receivable.

Substantially all of the Company's long-lived assets are located within the United States of America.

**16. Earnings Per Share:**

Basic income per share is calculated using the weighted average number of shares of common stock outstanding during the period. Restricted stock units and stock options are included in the calculation of diluted earnings per share, except when their effect would be anti-dilutive.

The Company's basic and diluted earnings per share amounts are as follows:

	<b>Year Ended</b>		
	<b>December 28, 2024</b>	<b>December 30, 2023</b>	<b>December 31, 2022</b>
	(in thousands, except for per share data)		
<b>Numerator:</b>			
Net income	\$ 201,670	\$ 121,159	\$ 223,334
<b>Denominator:</b>			
Basic earnings per share - weighted average shares outstanding	49,343	48,971	49,424
<b>Effect of potential dilutive securities:</b>			
Restricted stock units, employee stock purchase grants and stock options - dilutive shares	317	347	340
Diluted earnings per share - weighted average shares outstanding	<u>49,660</u>	<u>49,318</u>	<u>49,764</u>
<b>Earnings per share:</b>			
Basic	\$ 4.09	\$ 2.47	\$ 4.52
Diluted	\$ 4.06	\$ 2.46	\$ 4.49

**17. Share Repurchase Authorization:**

In February 2024, the Onto Innovation Board of Directors approved a new share repurchase authorization, which allows the Company to repurchase up to \$200 million worth of shares of its common stock. Repurchases may be made through both public market and private transactions from time to time with shares purchased being subsequently retired. During the twelve months ended December 28, 2024, the Company repurchased and retired 157 thousand shares of its common stock under this repurchase authorization. At December 28, 2024, there was \$174.9 million available for future share repurchases under this share repurchase authorization.

**ONTO INNOVATION INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)**

The following table summarizes the Company's stock repurchases:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands, except for per share data)		
Shares of common stock repurchased	157	46	1,018
Cost of stock repurchased	\$ 25,065	\$ 3,197	\$ 65,257
Average price paid per share	\$ 159.16	\$ 69.29	\$ 64.09

**18. Restructuring**

From time to time, the Company approves restructuring plans, which include workforce reductions, to streamline operations and align the Company's cost structure with its business outlook. These restructuring plans may result in charges to cost of goods sold for streamlining of certain manufacturing activities or for inventory write-downs primarily related to the exit of older product lines. Charges to operating expenses primarily include employee severance costs that are paid during the period incurred, and charges for streamlining of certain operating activities.

Restructuring expenses recorded in the Condensed Consolidated Statements of Operations are as follows:

	Year Ended		
	December 28, 2024	December 30, 2023	December 31, 2022
	(in thousands)		
Cost of goods sold	\$ 14,068	\$ 7,027	\$ -
Operating expenses	9,009	3,572	-
Total restructuring expenses	<u>\$ 23,077</u>	<u>\$ 10,599</u>	<u>\$ -</u>

## ONTO INNOVATION INC. AND SUBSIDIARIES

SCHEDULE OF VALUATION AND QUALIFYING ACCOUNTS  
(In thousands)

Column A	Column B	Column C		Column D	Column E
Description	Balance at Beginning of Period	Charged to (Recovery of) Costs and Expense	Charged to Other Accounts (net)	Deductions	Balance at End of Period
<b>Fiscal Year 2024:</b>					
Allowance for credit losses	\$ 2,659	\$ 100	\$ —	\$ 174	\$ 2,585
Deferred tax valuation allowance	13,960	—	—	1,790	12,170
<b>Fiscal Year 2023:</b>					
Allowance for credit losses	\$ 1,572	\$ 245	\$ 1,200	\$ 358	\$ 2,659
Deferred tax valuation allowance	11,772	2,188	—	—	13,960
<b>Fiscal Year 2022:</b>					
Allowance for credit losses	\$ 1,303	\$ 356	\$ —	\$ 87	\$ 1,572
Deferred tax valuation allowance	10,948	824	—	—	11,772



**Onto Innovation Inc.  
Employee Stock Option Agreement**

THIS AGREEMENT, dated \_\_\_\_\_, 20\_\_ (the “Grant Date”), is made between Onto Innovation Inc., a Delaware corporation, hereinafter referred to as the “Company,” and \_\_\_\_\_ (the “Optionee”).

1. Definitions. All capitalized terms used in this Agreement without definition shall have the meanings ascribed in the Onto Innovation 2020 Stock Plan, as amended from time to time (the “Plan”).

2. Notice of Stock Option Grant.

(a) Grant. You have been granted an option to purchase Common Stock of Company, subject to the terms and conditions of the Plan and this Option Agreement, as specified in Attachment I – Notice of Grant hereto (the “Notice of Grant”).

(b) Vesting Schedule. Subject to accelerated vesting as set forth below, this Option may be exercised, in whole or in part, in accordance with the schedule detailed in the Notice of Grant.

(c) Termination Period. This Option may be exercised for three (3) months after Optionee ceases to be a Service Provider. Upon the death or Disability of Optionee, this Option may be exercised for twelve (12) months after Optionee ceases to be a Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

3. Agreement.

(a) Grant of Option. The Plan Administrator of Company hereby grants to Optionee an option (the “Option”) to purchase the number of Shares, as set forth in the Notice of Grant, at the exercise price per share set forth in the Notice of Grant (the “Exercise Price”), subject to the terms and conditions of the Plan, which is incorporated herein by reference (the “Grant”). Subject to Section 14(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option (“ISO”), this Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code. However, if this Option is intended to be an Incentive Stock Option, to the extent that it exceeds the \$100,000 rule of Code Section 422(d) it shall be treated as a Nonstatutory Stock Option (“NSO”).

(b) Exercise of Option.

(i) Right to Exercise. This Option is exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and the applicable provisions of the Plan and this Option Agreement.

(ii) Method of Exercise. This Option is exercisable by delivery of an exercise notice, in the form established by Company from time-to-time (the “Exercise Notice”), which shall state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the “Exercised Shares”), and such other representations and agreements as may be required by Company pursuant to the provisions of the Plan. The Exercise Notice shall be completed by Optionee and delivered to the Chief Financial Officer of Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by Company of such fully executed Exercise Notice accompanied by such aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of this Option unless such issuance and exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Exercised Shares shall be considered transferred to Optionee on the date the Option is exercised with respect to such Exercised Shares.

(c) Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of Optionee:

(i) in cash or by personal check, certified check or bank check or wire transfer of immediately available funds;

- (ii) other Shares provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option is exercised, provided that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion;
- (iii) by delivery of a properly executed exercise notice together with any other documentation as the Administrator and the Participant's broker, if applicable, require to effect an exercise of the Option and delivery to the Company of the sale or other proceeds (as permitted by Applicable Law) required to pay the exercise price;
- (iv) by withholding Shares otherwise issuable in connection with the exercise of the Option ("net exercise"); or
- (v) such other consideration and method of payment authorized by the Administrator in its discretion or permitted by the Award Agreement, the Plan and Applicable Law.

(d) Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

(e) Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

(f) Tax Consequences. Some of the federal tax consequences relating to this Option, as of the date of this Option, are set forth below. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(g) Exercising the Option.

(i) Nonstatutory Stock Option. Optionee may incur regular federal income tax liability upon exercise of a NSO. Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over their aggregate Exercise Price. If Optionee is an Employee or a former Employee, Company will be required to withhold from his or her compensation or collect from Optionee and pay to the applicable taxing authorities an amount in cash equal to a percentage of this compensation income at the time of exercise, and may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(ii) Incentive Stock Option. If this Option qualifies as an ISO, Optionee will have no regular federal income tax liability upon its exercise, although the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over their aggregate Exercise Price will be treated as an adjustment to alternative minimum taxable income for federal tax purposes and may subject Optionee to alternative minimum tax in the year of exercise. In the event that Optionee ceases to be an Employee but remains a Service Provider, any Incentive Stock Option of Optionee that remains unexercised shall cease to qualify as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option on the date three (3) months and one (1) day following such change of status.

(iii) Disposition of Shares.

(A) NSO. If Optionee holds NSO Shares for at least one (1) year, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes.

(B) ISO. If Optionee holds ISO Shares for at least one (1) year after exercise and two (2) years after the grant date, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes. If Optionee disposes of ISO Shares within one (1) year after exercise or two (2) years after the grant date, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the excess, if any, of the lesser of (A) the difference between the Fair Market Value of the Shares acquired on the date of exercise and the aggregate Exercise Price, or (B) the difference between the sale price of such Shares and the aggregate Exercise Price. Any additional gain will be taxed as capital gain, short-term or long-term depending on the period that the ISO Shares were held.

(iv) Notice of Disqualifying Disposition of ISO Shares. If Optionee sells or otherwise disposes of any of the Shares acquired pursuant to an ISO on or before the later of (i) two (2) years after the grant date, or (ii) one (1) year after the exercise date, Optionee shall immediately notify Company in writing of such disposition. Optionee agrees that he or she may be subject to income tax withholding by Company on the compensation income recognized from such early disposition of ISO Shares by payment in cash or out of the current earnings paid to Optionee.

(h) Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to Optionee's interest except by means of a writing signed by Company and Optionee. This Option Agreement is governed by the internal substantive laws, but not the choice of law rules, of Delaware.

(i) Conformity to Securities Laws. Optionee acknowledges that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Exchange Act, and any and all regulations and rules promulgated thereunder by the Securities and Exchange Commission, including without limitation Rule 16b-3 under the Exchange Act. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Grants are granted, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

(j) NO GUARANTEE OF CONTINUED SERVICE. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF COMPANY (AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED AN OPTION OR PURCHASING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE WITH OPTIONEE'S RIGHT OR COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

(k) Notices. Notices required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States mail by certified mail, with postage and fees prepaid, addressed to Optionee to his/her address shown in Company records, and to Company at its principal executive office.

By your signature and the signature of Company's representative below, you and Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Option Agreement. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan and Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and Option Agreement. Optionee further agrees to notify Company upon any change in the residence address indicated below.

**OPTIONEE:** **ONTO INNOVATION INC.**

\_\_\_\_\_  
Signature By \_\_\_\_\_

\_\_\_\_\_  
Print Name Title \_\_\_\_\_

\_\_\_\_\_  
Residence Address

**CONSENT OF SPOUSE**

The undersigned spouse of Optionee has read and hereby approves the terms and conditions of the Plan and this Option Agreement. In consideration of Company's granting his or her spouse the right to purchase Shares as set forth in the Plan and this Option Agreement, the undersigned hereby agrees to be irrevocably bound by the terms and conditions of the Plan and this Option Agreement and further agrees that any community property interest shall be similarly bound. The undersigned hereby appoints the undersigned's spouse as attorney-in-fact for the undersigned with respect to any amendment or exercise of rights under the Plan or this Option Agreement.

\_\_\_\_\_  
Spouse of Optionee

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ATTACHMENT I

NOTICE OF GRANT

OPTIONEE INFORMATION:

Optionee Name: \_\_\_\_\_

Optionee Residence Address: MERGEFIELD STREET1 «STREET1»  
MERGEFIELD STREET2 «STREET2»  
MERGEFIELD CITY «CITY», MERGEFIELD STATE «STATE» MERGEFIELD ZIP «ZIP»  
MERGEFIELD COUNTRY «COUNTRY»

Optionee Section 16 Status: Optionee  FORMCHECKBOX is  FORMCHECKBOX is not a Section 16 Insider of Company.

GRANT INFORMATION:

Grant Date: \_\_\_\_\_ Grant Number: \_\_\_\_\_

Aggregate number of Stock Options subject to the Grant: \_\_\_\_\_

Exercise Price per Share: \_\_\_\_\_

Type of Option:  FORMCHECKBOX Nonstatutory Stock Option  FORMCHECKBOX Incentive Stock Option

Vesting Commencement Date: \_\_\_\_\_ Term/Expiration Date: \_\_\_\_\_

**Vesting Schedule:**

FORMCHECKBOX The Options shall vest with respect to twenty percent (20%) of the Options subject to the Grant (rounded down to the next whole number of shares) on each of the first five (5) anniversaries of the Grant Date.

FORMCHECKBOX The Options shall vest with respect to  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Additional Vesting Requirements:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Company Stock Plan Administration Service (the “Stock Service”):** \_\_\_\_\_  
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**Onto Innovation Inc.**  
**Director Stock Option Agreement**

THIS AGREEMENT, dated \_\_\_\_\_, 20\_\_ (the "Grant Date"), is made between Onto Innovation Inc., a Delaware corporation, hereinafter referred to as the "Company," and \_\_\_\_\_ (the "Optionee").

1. Definitions. All capitalized terms used in this Agreement without definition shall have the meanings ascribed in the Onto Innovation 2020 Stock Plan, as amended from time to time (the "Plan").

2. Notice of Stock Option Grant.

(a) Grant. You have been granted an option to purchase Common Stock of Company, subject to the terms and conditions of the Plan and this Option Agreement, as specified in Attachment I – Notice of Grant hereto (the "Notice of Grant").

(b) Vesting Schedule. Subject to accelerated vesting as set forth below, this Option may be exercised, in whole or in part, in accordance with the schedule detailed in the Notice of Grant.

(c) Termination Period. This Option may be exercised for three (3) months after Optionee ceases to be a Service Provider. Upon the death or Disability of Optionee, this Option may be exercised for twelve (12) months after Optionee ceases to be a Service Provider. In no event shall this Option be exercised later than the Term/Expiration Date as provided above.

3. Agreement.

(a) Grant of Option. The Plan Administrator of Company hereby grants to Optionee an option (the "Option") to purchase the number of Shares, as set forth in the Notice of Grant, at the exercise price per share set forth in the Notice of Grant (the "Exercise Price"), subject to the terms and conditions of the Plan, which is incorporated herein by reference (the "Grant"). Subject to Section 14(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option under Section 422 of the Code. However, if this Option is intended to be an Incentive Stock Option, to the extent that it exceeds the \$100,000 rule of Code Section 422(d) it shall be treated as a Nonstatutory Stock Option ("NSO").

(b) Exercise of Option.

(i) Right to Exercise. This Option is exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Grant and the applicable provisions of the Plan and this Option Agreement.

(ii) Method of Exercise. This Option is exercisable by delivery of an exercise notice, in the form established by Company from time-to-time (the "Exercise Notice"), which shall state the election to exercise the Option, the number of Shares in respect of which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by Company pursuant to the provisions of the Plan. The Exercise Notice shall be completed by Optionee and delivered to the Chief Financial Officer of Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares. This Option shall be deemed to be exercised upon receipt by Company of such fully executed Exercise Notice accompanied by such aggregate Exercise Price.

No Shares shall be issued pursuant to the exercise of this Option unless such issuance and exercise complies with Applicable Laws. Assuming such compliance, for income tax purposes the Exercised Shares shall be considered transferred to Optionee on the date the Option is exercised with respect to such Exercised Shares.

(c) Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of Optionee:

- (i) in cash or by personal check, certified check or bank check or wire transfer of immediately available funds;
- (ii) other Shares provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option is exercised, provided that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion;
- (iii) by delivery of a properly executed exercise notice together with any other documentation as the Administrator and the Participant's broker, if applicable, require to effect an exercise of the Option and delivery to the Company of the sale or other proceeds (as permitted by Applicable Law) required to pay the exercise price;
- (iv) by withholding Shares otherwise issuable in connection with the exercise of the Option ("net exercise"); or
- (v) such other consideration and method of payment authorized by the Administrator in its discretion or permitted by the Award Agreement, the Plan and Applicable Law.

(d) Non-Transferability of Option. This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by Optionee. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

(e) Term of Option. This Option may be exercised only within the term set out in the Notice of Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

(f) Tax Consequences. Some of the federal tax consequences relating to this Option, as of the date of this Option, are set forth below. THIS SUMMARY IS NECESSARILY INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(g) Exercising the Option.

(i) Nonstatutory Stock Option. Optionee may incur regular federal income tax liability upon exercise of a NSO. Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over their aggregate Exercise Price. If Optionee is an Employee or a former Employee, Company will be required to withhold from his or her compensation or collect from Optionee and pay to the applicable taxing authorities an amount in cash equal to a percentage of this compensation income at the time of exercise, and may refuse to honor the exercise and refuse to deliver Shares if such withholding amounts are not delivered at the time of exercise.

(ii) Incentive Stock Option. If this Option qualifies as an ISO, Optionee will have no regular federal income tax liability upon its exercise, although the excess, if any, of the Fair Market Value of the Exercised Shares on the date of exercise over their aggregate Exercise Price will be treated as an adjustment to alternative minimum taxable income for federal tax purposes and may subject Optionee to alternative minimum tax in the year of exercise. In the event that Optionee ceases to be an Employee but remains a Service Provider, any Incentive Stock Option of Optionee that remains unexercised shall cease to qualify as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option on the date three (3) months and one (1) day following such change of status.

(iii) Disposition of Shares.

(A) NSO. If Optionee holds NSO Shares for at least one (1) year, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes.

(B) ISO. If Optionee holds ISO Shares for at least one (1) year after exercise and two (2) years after the Grant Date, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes. If Optionee disposes of ISO Shares within one (1) year after exercise or two (2) years after the grant date, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the excess, if any, of the lesser of (A) the difference between the Fair Market Value of the Shares acquired on the date of exercise and the aggregate Exercise Price, or (B) the difference between the sale price of such Shares and the aggregate Exercise Price.

Any additional gain will be taxed as capital gain, short-term or long-term depending on the period that the ISO Shares were held.

(iv) Notice of Disqualifying Disposition of ISO Shares. If Optionee sells or otherwise disposes of any of the Shares acquired pursuant to an ISO on or before the later of (i) two (2) years after the grant date, or (ii) one (1) year after the exercise date, Optionee shall immediately notify Company in writing of such disposition. Optionee agrees that he or she may be subject to income tax withholding by Company on the compensation income recognized from such early disposition of ISO Shares by payment in cash or out of the current earnings paid to Optionee.

(h) Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of Company and Optionee with respect to the subject matter hereof, and may not be modified adversely to Optionee's interest except by means of a writing signed by Company and Optionee. This Option Agreement is governed by the internal substantive laws, but not the choice of law rules, of Delaware.

(i) Conformity to Securities Laws. Optionee acknowledges that the Plan and this Agreement are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Exchange Act, and any and all regulations and rules promulgated thereunder by the Securities and Exchange Commission, including without limitation Rule 16b-3 under the Exchange Act. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Grants are granted, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

(j) NO GUARANTEE OF CONTINUED SERVICE. OPTIONEE ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF COMPANY (AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED AN OPTION OR PURCHASING SHARES HEREUNDER). OPTIONEE FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE WITH OPTIONEE'S RIGHT OR COMPANY'S RIGHT TO TERMINATE OPTIONEE'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

(k) Notices. Notices required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States mail by certified mail, with postage and fees prepaid, addressed to Optionee to his/her address shown in Company records, and to Company at its principal executive office.

By your signature and the signature of Company's representative below, you and Company agree that this Option is granted under and governed by the terms and conditions of the Plan and this Option Agreement. Optionee has reviewed the Plan and this Option Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option Agreement and fully understands all provisions of the Plan and Option Agreement. Optionee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and Option Agreement. Optionee further agrees to notify Company upon any change in the residence address indicated below.

**OPTIONEE:** **ONTO INNOVATION INC.**

_____ Signature	By	_____
_____ Print Name	Title	_____
_____ Residence Address		

**CONSENT OF SPOUSE**

The undersigned spouse of Optionee has read and hereby approves the terms and conditions of the Plan and this Option Agreement. In consideration of Company's granting his or her spouse the right to purchase Shares as set forth in the Plan and this Option Agreement, the undersigned hereby agrees to be irrevocably bound by the terms and conditions of the Plan and this Option Agreement and further agrees that any community property interest shall be similarly bound. The undersigned hereby appoints the undersigned's spouse as attorney-in-fact for the undersigned with respect to any amendment or exercise of rights under the Plan or this Option Agreement.

\_\_\_\_\_  
Spouse of Optionee

4

**ATTACHMENT I**

**NOTICE OF GRANT**

OPTIONEE INFORMATION:

**Optionee Name:** \_\_\_\_\_

**Optionee Residence Address:** MERGEFIELD STREET1 «STREET1»

MERGEFIELD STREET2 «STREET2»

MERGEFIELD CITY «CITY», MERGEFIELD STATE «STATE» MERGEFIELD ZIP «ZIP»

MERGEFIELD COUNTRY «COUNTRY»

**Optionee Section 16 Status:** Optionee  **is**  **is not** a Section 16 Insider of Company.

GRANT INFORMATION:

**Grant Date:** \_\_\_\_\_ **Grant Number:** \_\_\_\_\_

**Aggregate number of Stock Options subject to the Grant:** \_\_\_\_\_

**Exercise Price per Share:** \_\_\_\_\_





EXHIBIT 10.4

**Onto Innovation Inc.**

**Executive Restricted Stock Unit Grant Agreement**

THIS AGREEMENT (“Agreement”), dated %%OPTION\_DATE, 'Month DD, YYYY'%% (the “Award Date”), is made between Onto Innovation Inc., a Delaware corporation, hereinafter referred to as the “Company,” and %%FIRST\_NAME%% %%LAST\_NAME%% (the “Participant”).

1. Definitions. All capitalized terms used in this Agreement without definition shall have the meanings ascribed in the Onto Innovation 2020 Stock Plan, as amended from time to time (the “Plan”). In addition, the following definition shall apply:

- “Retirement Eligible” shall mean the Participant has: (i) achieved a combination of age plus years of service with the company totaling 70, with a base minimum age of 58 years old and a minimum service term of five (5) years, and (ii) provided written notice to the Company’s Chief Executive Officer or most senior human resources executive of a date certain on which the Participant intends to retire, which date is at least 12 full calendar months following the date on which such notice is provided (the “Proposed Retirement Date”).
- “Retirement” shall mean the Participant’s voluntary separation from service with the Company after becoming Retirement Eligible on the Participant’s Proposed Retirement Date, or as otherwise approved by the Administrator.

2. Award of Restricted Stock Units.

(a) Award. In consideration of Participant’s agreement to remain in the employ of Company or one of its Subsidiaries, and for other good and valuable consideration, the Company hereby issues to Participant, as of the Award Date, the grant of Restricted Stock Units (“RSUs”) covering shares (“Shares”) of common stock of the Company (“Common Stock”) as described in Attachment I – Notice of Award (the “Notice of Award”) attached to this Agreement (the “Award”). The number of RSUs subject to the Award (which shall be subject to adjustment in accordance with Section 14 of the Plan) is set forth in the Notice of Award. Each RSU represents the right to receive one Share, subject to the terms and conditions of this Agreement. Upon granting of the Award, all RSUs shall be credited to Participant’s employee stock plan account established at the stock plan administration service determined by Company (the “Stock Service”). The current Stock Service is set forth in the Notice of Award.

(b) Vested Shares to be Issued in Book Entry Form. Upon vesting of the RSUs and the satisfaction of all other applicable conditions set forth in this Agreement, the Company shall cause uncertificated Shares to be issued to Participant’s account. Shares to be delivered to Participant under the terms of this Award shall be delivered to Participant no later than two and one-half months following the last day of the year that includes the date of vesting and lapse of Restrictions, provided that Company may further delay the distribution of Shares with respect to RSUs that become vested under Section 4(b) as a result of Participant’s death, but not beyond such period as is permitted under Section 409A of the Code (as defined below).

(c) Plan. The Award granted hereunder is subject to the terms and provisions of the Plan, including without limitation, Article 14(a) thereof. The Award constitutes Restricted Stock Units pursuant to Section 8 of the Plan.

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3. Restrictions.

(a) Forfeiture. Except only as may otherwise be expressly set forth in (i) any employment, severance or change in control agreement of the Company or a Subsidiary with Participant, or (ii) Section 4 below related to the Retirement or death of the Participant, any Award which is not vested as of the date Participant ceases to be an employee of Company or one of its Subsidiaries shall thereupon be forfeited immediately and terminate without any further action by Company.

(b) Vesting and Lapse of Restrictions. Subject to the terms of this Agreement, the RSUs covered by this Award shall vest and all Restrictions thereon shall lapse in accordance with the schedule set forth in the Notice of Award, provided in each case that Participant remains continuously as an employee of Company or a Subsidiary from the Award Date through the particular scheduled vesting date therefor (except only as may otherwise be expressly set forth in (i) any employment, severance or change in control agreement of the Company or a Subsidiary with Participant, or (ii) Section 4 below related to the Retirement or death of the Participant). For purposes of this Agreement, “Restrictions” shall mean the exposure to forfeiture set forth in this Award.

(c) Acceleration of Vesting. Notwithstanding any other provision of this Award, any time-based Award shall become fully vested and all Restrictions applicable to such Award shall lapse in the event of a Change in Control event (as defined in Section 2(h) of the Plan) and the successor or acquiring corporation or an affiliate thereof does not assume or substitute for this Award in accordance with Section 14(c)(i) of the Plan. Should the successor or acquiring corporation or an affiliate thereof assume or substitute for the time-based Award in accordance with Section 14(c)(i) of the Plan, then no accelerated vesting or lapse of Restrictions of this Award shall apply, except as the Board may otherwise determine or as provided in an employment or other written agreement with the Participant.

(d) Tax Withholding; Issuance of Uncertificated Shares for Participants Domiciled Outside the U.S. For Participants domiciled outside of the United States, the provisions set forth herein related to U.S. federal and/or state tax withholding do not apply. Shares shall be delivered to such Participant or his or her legal representative at the time the vesting requirements as provided in this Award shall have been satisfied. Participants domiciled outside the U.S. are advised to consult with a local tax advisor regarding the tax ramifications of the Award in their country of residence and assure compliance with such tax obligations.

(e) Tax Withholding for Participants Domiciled in U.S. Withholding Requirements. By accepting this Award, Participant agrees to make appropriate arrangements with the Company for the satisfaction, as of the applicable withholding date, of all applicable federal, state and local tax withholding requirements, including in connection with the vesting and settlement of this Award. No Shares will be issued until satisfaction of such applicable tax withholding has been received by the Company. Prior to the delivery of any Shares pursuant to this Award, the Company will have the power and the right to deduct or withhold an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant’s FICA obligation) required to be withheld with respect to the vesting or settlement of this Award.

(f) Withholding Arrangements. The Company, pursuant to such procedures as it will specify from time to time, will permit Participant to satisfy such tax withholding obligation, in each case as of the applicable tax withholding date, by (without limitation and in such combinations as the Participant may elect):

- (i) paying cash or by personal check, certified check or bank check or wire transfer of immediately available funds;
- (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld; or

- (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld.

The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld. Participant may elect to make prior arrangements with the Stock Service to sell Shares as of the vesting date and apply the appropriate amount of the proceeds thereof to the applicable tax withholding amount and remit any balance of the proceeds to Participant, provided that if Participant elects to have any Shares sold by the Stock Service or otherwise, any such proposed sale of Shares shall be in compliance with and satisfy all requirements and conditions under the Onto Innovation Inc. Insider Trading Compliance Program.

4. Retirement; Death.

(a) Subject to the terms of this Agreement, in the event of the Retirement of the Participant, the RSUs shall vest based on the vesting schedule set forth in the Notice of Award for time-based Awards provided that, during the period beginning on the Participant's separation from service date and ending on the final day of the vesting schedule set forth in the Notice of Award, the Participant: (a) continues to be available to provide service to the Company as requested and (b) does not become employed by or otherwise provide paid services to any other entity or organization; provided, however, that the Participant may be permitted to serve as an independent director on the board of directors for one or more entities that are not competitive with the Company's business so long as any such service as an independent director is reviewed and approved in advance by the Committee. For the avoidance of doubt, if the Participant fails to comply with the conditions set forth in this paragraph, the Participant will forfeit all unvested Awards. For clarity, in the event of the Participant's Retirement, there will be no acceleration of an Award's vesting schedule or forfeiture of unvested Awards.

(b) Subject to the terms of this Agreement, in the event of the death of the Participant while employed by Company, any unvested RSUs shall become immediately vested.

5. Company Share Issuance Prerequisites. Company shall not be required to issue or deliver any Shares prior to the fulfillment of all of the following conditions:

(a) the admission of the Shares to listing on all stock exchanges on which such Common Stock is then listed;

(b) the completion of any registration or other qualification of the Shares under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or other governmental regulatory body, which the Company shall, in its sole and absolute discretion, deem necessary and advisable;

(c) the obtaining of any approval or other clearance from any state or federal governmental agency that the Company shall, in its absolute discretion, determine to be necessary or advisable; and

(d) the lapse of any such reasonable period of time following the date the Restrictions lapse as the Company may from time to time establish for reasons of administrative convenience.

6. Restricted Stock Units Not Transferable. No RSUs or any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Participant or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect; *provided, however*, that this Section 6 shall not prevent transfers by will or by applicable laws of descent and distribution if permitted under the Plan.

7. Rights as Stockholder. Until Participant has satisfied all requirements for vesting and the satisfaction of all conditions set forth in this Agreement and Shares have been issued to Participant, Participant shall not be deemed to be a shareholder or to have any of the rights of a shareholder with respect to any such Shares.

8. Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Participant any right to continue to serve as an employee or other Service Provider of Company or any of its Subsidiaries.

9. Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement and the Award regardless of the law that might be applied under principles of conflicts of laws.

10. Conformity to Securities Laws. Participant acknowledges that the Plan and this Award are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Exchange Act, and all regulations and rules promulgated thereunder by the Securities and Exchange Commission, including without limitation Rule 16b-3 under the Exchange Act. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Awards are granted, only in such a manner as to conform to such laws, rules and regulations.

11. Amendment, Suspension and Termination. The Awards may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Compensation Committee of the Board of Directors of the Company, which is the Administrator of the Plan (the "Committee"), *provided* that, except as otherwise provided by the Plan, neither the amendment, suspension nor termination of this Agreement shall, without the consent of Participant, alter or impair any material rights of Participant under this Award.

12. Notices. Notices required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States mail by certified mail, with postage and fees prepaid, addressed to Participant at his or her address then shown in Company records, and to Company at its principal executive office.

13. Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions will nevertheless be binding and enforceable.

14. Section 409A.

(a) This Award is intended to constitute a "short-term deferral" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended ("Code") or, in the alternative, is intended to comply with the requirements of Section 409A of the Code and the Treasury regulations and other guidance promulgated thereunder so as not to be subject to taxes, interest or penalties under Section 409A of the Code. This Agreement shall be interpreted and administered to give effect to such intention and understanding.

(b) Notwithstanding anything in this Agreement to the contrary, any payment or issuance of Shares to be made to the Participant under this Award in connection with Participant's separation from service shall not be made until the date six months and one day after the date of the Participant's separation from service to the extent necessary to comply with Section 409A(a)(B)(i) of the Code and applicable Treasury regulations thereunder, after giving effect to the extent applicable to the short-term deferral exemption under Treasury Regulation §1.409A-1(b)(4) and the severance pay exemption under Treasury Regulation §1.409A-1(b)(9)(iii). Following any such six-month and one-day delay, all such delayed payments will be paid in a single lump sum on the date six months and one day after the Participant's separation from service. For the purposes of this Agreement, "separation of service" means a separation from service as defined in Section 409A of the Code determined using the default provisions set forth in Treasury Regulation §1.409A-1(h) or any successor regulation thereto. Each and every payment or issuance of

Shares made pursuant to this Award shall be deemed a separate payment or issuance and not a series of payments or issuances.

(c) If any provision of this Award would, in the reasonable, good faith judgment of the Committee, result or likely result in the imposition on the Participant, beneficiary or any other person claiming by or through the Participant, of any additional tax, accelerated taxation, interest or penalties under Section 409A of the Code, the Committee may, in its sole discretion, modify the terms of this Award or take any other such action, without the consent of the Participant or any spouse, beneficiary or any other person claiming by or through the Participant, in the manner that the Committee may reasonably and in good faith determine to be necessary or advisable to avoid the imposition of such additional tax, accelerated taxation, interest or penalties or otherwise comply with Sections 409A of the Code. However, nothing in this Agreement is intended to or shall create any obligation or liability on the part of the Company or the Committee or its members to modify the Agreement, the Award or any RSUs or other rights granted hereunder nor guarantee that the Participant will not be subject to additional taxes, accelerated taxation, interest or penalties under Section 409A of the Code.

Participant represents that he or she has read this Agreement and the Plan and is familiar with the terms and provisions of each. Participant acknowledges that the Award is issued pursuant to, and is subject to the terms and conditions of, the Plan, and Participant will be bound by the terms of the Plan as if it were set forth verbatim in this Agreement. Participant agrees to comply with all rules the Committee may establish from time to time with respect to the Plan. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee with respect to any questions arising under the Plan or this Agreement. Participant further acknowledges and agrees that this Agreement (including the Plan) constitutes the entire agreement between the parties with respect to the Award and that this Agreement (including the Plan) supersedes any and all prior agreements, whether written or oral, between the parties with respect to the Award.

**ATTACHMENT I  
NOTICE OF AWARD**

PARTICIPANT INFORMATION:

**Participant Name:** %%FIRST\_NAME%- %%%LAST\_NAME%-%

**Participant Residence Address:** %%ADDRESS\_LINE\_1%- %%%ADDRESS\_LINE\_2%- %  
%%ADDRESS\_LINE\_3%- %  
%%CITY%- %, %%%STATE%- %%%ZIPCODE%- %  
%%COUNTRY%- %

**Participant Section 16 Status:** Participant  is  is not a Section 16 Insider of Company.

AWARD INFORMATION:

**Award Date:** %%OPTION\_DATE,'Month DD, YYYY'%- %

**Aggregate number of Restricted Stock Units subject to the Award:** %%TOTAL\_SHARES\_GRANTED,'999,999,999'%- %

**Grant Number:** %%OPTION\_NUMBER%- %

**Type of Award:**  Time-based  Other: \_\_\_\_\_

**Vesting Schedule:**

The time-based Award shall vest and Restrictions shall lapse with respect to thirty-three percent of the Shares subject to the Award (rounded down to the next whole number of shares) on each of the first three anniversaries of the Award Date.

The Award shall vest and Restrictions shall lapse with respect to

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Additional Vesting Requirements:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Company Stock Plan Administration Service (the "Stock Service"):** E\*TRADE

**Onto Innovation Inc.****Executive Performance Stock Unit Grant Agreement**

THIS AGREEMENT (“Agreement”), dated **%%OPTION\_DATE, 'Month DD, YYYY'%%-%** (the “Award Date”), is made between Onto Innovation Inc., a Delaware corporation, hereinafter referred to as the “Company,” and **%%FIRST\_NAME%%-% %%LAST\_NAME%%-%** (the “Participant”).

1. **Definitions.** All capitalized terms used in this Agreement without definition shall have the meanings ascribed in the Onto Innovation 2020 Stock Plan, as amended from time to time (the “Plan”). In addition, the following definition shall apply:

- “Retirement Eligible” shall mean the Participant has: (i) achieved a combination of age plus years of service with the company totaling 70, with a base minimum age of 58 years old and a minimum service term of five (5) years, and (ii) provided written notice to the Company’s Chief Executive Officer or most senior human resources executive of a date certain on which the Participant intends to retire, which date is at least 12 full calendar months following the date on which such notice is provided (the “Proposed Retirement Date”).
- “Retirement” shall mean the Participant’s voluntary separation from service with the Company after becoming Retirement Eligible on the Participant’s Proposed Retirement Date, or as otherwise approved by the Administrator.

2. **Award of Performance Stock Units.**

(a) **Award.** In consideration of Participant’s agreement to remain in the employ of Company or one of its Subsidiaries, and for other good and valuable consideration, the Company hereby issues to Participant, as of the Award Date, the grant of Performance Stock Units (“PSUs”) covering shares (“Shares”) of common stock of the Company (“Common Stock”) as described in Attachment I – Notice of Award (the “Notice of Award”) attached to this Agreement (the “Award”). The number of PSUs subject to the Award (which shall be subject to adjustment in accordance with Section 14 of the Plan) is set forth in the Notice of Award. Each PSU represents the right to receive one Share, subject to the terms and conditions of this Agreement. Upon granting of the Award, all PSUs shall be credited to Participant’s employee stock plan account established at the stock plan administration service determined by Company (the “Stock Service”). The current Stock Service is set forth in the Notice of Award.

(b) **Vested Shares to be Issued in Book Entry Form.** Upon vesting of the PSUs and the satisfaction of all other applicable conditions set forth in this Agreement, the Company shall cause uncertificated Shares to be issued to Participant’s account. Shares to be delivered to Participant under the terms of this Award shall be delivered to Participant no later than two and one-half months following the last day of the year that includes the date of vesting and lapse of Restrictions, provided that Company may further delay the distribution of Shares with respect to PSUs that become vested under Section 4(b) as a result of Participant’s death, but not beyond such period as is permitted under Section 409A of the Code (as defined below).

(c) **Plan.** The Award granted hereunder is subject to the terms and provisions of the Plan, including without limitation, Article 14(a) thereof. The Award constitutes Performance Stock Units pursuant to Section 10 of the Plan.

3. Restrictions.

(a) Forfeiture. Except only as may otherwise be expressly set forth in (i) any employment, severance or change in control agreement of the Company or a Subsidiary with Participant, or (ii) Section 4 below related to the Retirement or death of the Participant, any Award which is not vested as of the date Participant ceases to be an employee of Company or one of its Subsidiaries shall thereupon be forfeited immediately and terminate without any further action by Company.

(b) Vesting and Lapse of Restrictions. Subject to the terms of this Agreement, the PSUs covered by this Award shall vest and all Restrictions thereon shall lapse in accordance with the schedule set forth in the Notice of Award, provided in each case that Participant remains continuously as an employee of Company or a Subsidiary from the Award Date through the particular scheduled vesting date therefor (except only as may otherwise be expressly set forth in (i) any employment, severance or change in control agreement of the Company or a Subsidiary with Participant, or (ii) Section 4 below related to the Retirement or death of the Participant). For purposes of this Agreement, "Restrictions" shall mean the exposure to forfeiture set forth in this Award.

(c) Acceleration of Vesting. Notwithstanding any other provision of this Award, with regard to any performance-based Award, in the event of a Change in Control event, the performance conditions will be deemed to have been achieved at the target level and the Participant will be deemed to have earned the target number of PSUs that were subject to the Award.

(d) Tax Withholding; Issuance of Uncertificated Shares for Participants Domiciled Outside the U.S. For Participants domiciled outside of the United States, the provisions set forth herein related to U.S. federal and/or state tax withholding do not apply. Shares shall be delivered to such Participant or his or her legal representative at the time the vesting requirements as provided in this Award shall have been satisfied. Participants domiciled outside the U.S. are advised to consult with a local tax advisor regarding the tax ramifications of the Award in their country of residence and assure compliance with such tax obligations.

(e) Tax Withholding for Participants Domiciled in U.S. Withholding Requirements. By accepting this Award, Participant agrees to make appropriate arrangements with the Company for the satisfaction, as of the applicable withholding date, of all applicable federal, state and local tax withholding requirements, including in connection with the vesting and settlement of this Award. No Shares will be issued until satisfaction of such applicable tax withholding has been received by the Company. Prior to the delivery of any Shares pursuant to this Award, the Company will have the power and the right to deduct or withhold an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to the vesting or settlement of this Award.

(f) Withholding Arrangements. The Company, pursuant to such procedures as it will specify from time to time, will permit Participant to satisfy such tax withholding obligation, in each case as of the applicable tax withholding date, by (without limitation and in such combinations as the Participant may elect):

- (i) paying cash or by personal check, certified check or bank check or wire transfer of immediately available funds;
- (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld; or
- (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld.

The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld. Participant may elect to make prior arrangements with the Stock Service to sell Shares as

of the vesting date and apply the appropriate amount of the proceeds thereof to the applicable tax withholding amount and remit any balance of the proceeds to Participant, provided that if Participant elects to have any Shares sold by the Stock Service or otherwise, any such proposed sale of Shares shall be in compliance with and satisfy all requirements and conditions under the Onto Innovation Inc. Insider Trading Compliance Program.

4. Retirement; Death.

(a) Subject to the terms of this Agreement, in the event of the Retirement of the Participant, the PSUs shall vest based on the actual performance results for performance-based Awards provided that, during the period beginning on the Participant's separation from service date and ending on the final day of the vesting schedule set forth in the Notice of Award, the Participant: (a) continues to be available to provide service to the Company as requested and (b) does not become employed by or otherwise provide paid services to any other entity or organization; provided, however, that the Participant may be permitted to serve as an independent director on the board of directors for one or more entities that are not competitive with the Company's business so long as any such service as an independent director is reviewed and approved in advance by the Committee. For the avoidance of doubt, if the Participant fails to comply with the conditions set forth in this paragraph, the Participant will forfeit all unvested Awards. For clarity, in the event of the Participant's Retirement, there will be no acceleration of an Award's vesting schedule or forfeiture of unvested Awards.

(b) Subject to the terms of this Agreement, in the event of the death of the Participant while employed by Company, unvested PSUs shall become immediately vested in accordance with the following calculation:

- The target number of PSUs multiplied by the number of days worked since the grant date divided by the total number of days in the full vesting term.

In the event of Retirement or death, any PSUs under this Award that do not vest under this Section 4 will be forfeited.

5. Company Share Issuance Prerequisites. Company shall not be required to issue or deliver any Shares prior to the fulfillment of all of the following conditions:

- (a) the admission of the Shares to listing on all stock exchanges on which such Common Stock is then listed;
- (b) the completion of any registration or other qualification of the Shares under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or other governmental regulatory body, which the Company shall, in its sole and absolute discretion, deem necessary and advisable;
- (c) the obtaining of any approval or other clearance from any state or federal governmental agency that the Company shall, in its absolute discretion, determine to be necessary or advisable; and
- (d) the lapse of any such reasonable period of time following the date the Restrictions lapse as the Company may from time to time establish for reasons of administrative convenience.

6. Performance Stock Units Not Transferable. No PSUs or any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Participant or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect; *provided, however*, that this Section 6 shall not prevent transfers by will or by applicable laws of descent and distribution if permitted under the Plan.

7. Rights as Stockholder. Until Participant has satisfied all requirements for vesting and the satisfaction of all conditions set forth in this Agreement and Shares have been issued to Participant, Participant shall not be deemed to be a shareholder or to have any of the rights of a shareholder with respect to any such Shares.

8. Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Participant any right to continue to serve as an employee or other Service Provider of Company or any of its Subsidiaries.

9. Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement and the Award regardless of the law that might be applied under principles of conflicts of laws.

10. Conformity to Securities Laws. Participant acknowledges that the Plan and this Award are intended to conform to the extent necessary with all provisions of the Securities Act of 1933, as amended, and the Exchange Act, and all regulations and rules promulgated thereunder by the Securities and Exchange Commission, including without limitation Rule 16b-3 under the Exchange Act. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Awards are granted, only in such a manner as to conform to such laws, rules and regulations.

11. Amendment, Suspension and Termination. The Awards may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Compensation Committee of the Board of Directors of the Company, which is the Administrator of the Plan (the "Committee"), *provided* that, except as otherwise provided by the Plan, neither the amendment, suspension nor termination of this Agreement shall, without the consent of Participant, alter or impair any material rights of Participant under this Award.

12. Notices. Notices required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States mail by certified mail, with postage and fees prepaid, addressed to Participant at his or her address then shown in Company records, and to Company at its principal executive office.

13. Severability. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions will nevertheless be binding and enforceable.

14. Section 409A.

(a) This Award is intended to constitute a "short-term deferral" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended ("Code") or, in the alternative, is intended to comply with the requirements of Section 409A of the Code and the Treasury regulations and other guidance promulgated thereunder so as not to be subject to taxes, interest or penalties under Section 409A of the Code. This Agreement shall be interpreted and administered to give effect to such intention and understanding.

(b) Notwithstanding anything in this Agreement to the contrary, any payment or issuance of Shares to be made to the Participant under this Award in connection with Participant's separation from service shall not be made until the date six months and one day after the date of the Participant's separation from service to the extent necessary to comply with Section 409A(a)(B)(i) of the Code and applicable Treasury regulations thereunder, after giving effect to the extent applicable to the short-term deferral exemption under Treasury Regulation §1.409A-1(b)(4) and the severance pay exemption under Treasury Regulation §1.409A-1(b)(9)(iii). Following any such six-month and one-day delay, all such delayed payments will be paid in a single lump sum on the date six months and one day after the Participant's separation from service. For the purposes of this Agreement, "separation of service" means a separation from service as defined in Section 409A of the Code determined using the default provisions set forth in Treasury Regulation §1.409A-1(h) or any successor regulation thereto. Each and every payment or issuance of

Shares made pursuant to this Award shall be deemed a separate payment or issuance and not a series of payments or issuances.

(c) If any provision of this Award would, in the reasonable, good faith judgment of the Committee, result or likely result in the imposition on the Participant, beneficiary or any other person claiming by or through the Participant, of any additional tax, accelerated taxation, interest or penalties under Section 409A of the Code, the Committee may, in its sole discretion, modify the terms of this Award or take any other such action, without the consent of the Participant or any spouse, beneficiary or any other person claiming by or through the Participant, in the manner that the Committee may reasonably and in good faith determine to be necessary or advisable to avoid the imposition of such additional tax, accelerated taxation, interest or penalties or otherwise comply with Sections 409A of the Code. However, nothing in this Agreement is intended to or shall create any obligation or liability on the part of the Company or the Committee or its members to modify the Agreement, the Award or any PSUs or other rights granted hereunder nor guarantee that the Participant will not be subject to additional taxes, accelerated taxation, interest or penalties under Section 409A of the Code.

Participant represents that he or she has read this Agreement and the Plan and is familiar with the terms and provisions of each. Participant acknowledges that the Award is issued pursuant to, and is subject to the terms and conditions of, the Plan, and Participant will be bound by the terms of the Plan as if it were set forth verbatim in this Agreement. Participant agrees to comply with all rules the Committee may establish from time to time with respect to the Plan. Participant agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee with respect to any questions arising under the Plan or this Agreement. Participant further acknowledges and agrees that this Agreement (including the Plan) constitutes the entire agreement between the parties with respect to the Award and that this Agreement (including the Plan) supersedes any and all prior agreements, whether written or oral, between the parties with respect to the Award.

**ATTACHMENT I  
NOTICE OF AWARD**

PARTICIPANT INFORMATION:

**Participant Name:** %%FIRST\_NAME%--% %%LAST\_NAME%--%

**Participant Residence Address:** %%ADDRESS\_LINE\_1%--% %%ADDRESS\_LINE\_2%--%  
%%ADDRESS\_LINE\_3%--%  
%%CITY%--%, %%STATE%--% %%ZIPCODE%--%  
%%COUNTRY%--%

**Participant Section 16 Status:** Participant  is  is not a Section 16 Insider of Company.

AWARD INFORMATION:

**Award Date:** %%OPTION\_DATE,'Month DD, YYYY'%--%

**Aggregate number of Performance Stock Units subject to the Award:** %%TOTAL\_SHARES\_GRANTED,'999,999,999'%--%

**Grant Number:** %%OPTION\_NUMBER%--%

**Type of Award:**  Performance-based

**Vesting Schedule:**

The performance-based Award shall vest in full upon the conclusion of the performance period with the final number of shares earned contingent upon the meeting of the applicable performance criteria set forth in the associated performance plan document.

The Award shall vest and Restrictions shall lapse with respect to

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Additional Vesting Requirements:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Company Stock Plan Administration Service (the "Stock Service"):** E\*TRADE



April 25, 2023

Ramil Yaldae

[Address redacted]

Dear Ramil:

On behalf of Onto Innovation, I am pleased to offer you the position of Chief Operation Officer reporting to Mike Plisinski. Your transition will be effective May 5<sup>th</sup>, 2023.

Your starting salary will remain at \$12,115.38 per pay period, subject to required withholding and deductions, which when annualized is \$315,000.00.

You will be eligible to participate in the Company's Tier I Incentive Compensation Plan with a cash bonus target of 65% of your base salary, the terms of which will be approved by the Compensation Committee of the Board of Directors. Participation in the incentive compensation plan each subsequent year is at management's sole discretion. All plans and compensation schemes are subject to modification or cancellation at the company's discretion.

In addition, to recognize your potential for future contribution, you will receive a Restricted Stock Unit (RSU) grant with an estimated value of \$350,000.00. The RSU grant will vest annually over a three-year period at the rate of 1/3 per year. You will receive your RSU grant on the next quarterly grant date to occur after your start date and Compensation Committee approval.

Under the Company's Tier I Incentive Compensation Plan you will be eligible to receive an annual equity grant in 2024 in an amount to be determined by the Compensation Committee, 50% of the grant in the form of time-based restricted stock units and 50% in the form of market-based performance stock units

We look forward to your continued success at Onto!

Your employment with Onto Innovation is at-will and neither this letter or other oral or written representations may be considered a contract for any specific period.

If this summary of the terms meets with your approval, please sign and date this letter at the place indicated below by April 27, 2023

Sincerely,

/s/ Mike Plisinski

Mike Plisinski

Chief Executive Officer

**Ramil Yaldae:**

**Date signed:**

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August 30, 2021

Srinivas Vedula  
[Address Redacted]

Dear Srini,

I'm excited to share that you been promoted to Senior Vice President Sales, effective August 30<sup>th</sup>, 2020. Congratulations!

Your base salary will remain at \$11,283.65 per pay period subject to required withholding and deductions, which when annualized is \$293,375.00.

You will be eligible to participate in the Company's Key Executive Incentive Compensation Plan with a cash bonus target of 60% of your base salary, the terms of which will be approved by the Compensation Committee of the Board of Directors. For 2021, upon meeting personal goals established thru December 2021, your bonus will be pro-rated for the year based on your start date.

Subject to the terms and conditions of the Onto Innovation 2020 Stock Plan and the approval of the Compensation Committee of the Board of Directors, you will receive a Restricted Stock Unit ("RSU") grant with a value of \$125,000.00, which will vest in equal installments over 3 years.

As a Senior Executive you will participate in the Key Executive Incentive Compensation Plan. This plan includes an annual equity grant. These grants are typically made in the February timeframe and though not guaranteed, we'd expect a grant with a value of approximately \$250,000 will be extended to you, subject to the annual approval of the Compensation Committee. These grants are awarded as follows: 50% are time-based, vesting in equal installments over 3 years, and 50% are performance based, contingent on Onto Innovation's stock performance as compared with the SOXX index as of the 2- and 3-year anniversaries of the grant date. All annual grants are subject to the terms of the Onto Innovation 2020 Stock Plan.

You will also be eligible for additional Executive benefits which includes reimbursement for tax preparation and an annual airline club membership

Congratulations again, I am excited to work closely with you in your new role!

Thank you,

/s/ Michael Plisinski

Michael Plisinski  
CEO  
Onto Innovation

**ONTO INNOVATION INC.**Insider Trading Policy**1. BACKGROUND AND PURPOSE****1.1 Why Have We Adopted This Policy?**

The federal securities laws prohibit any member of the Board of Directors (a “Director”), officer (as defined in Rule 16a-1(f) under the Securities Exchange Act of 1934 (the “Exchange Act”), an “Executive Officer”) or employee of Onto Innovation Inc. (together with its subsidiaries, the “Company”) from purchasing or selling Company securities on the basis of material nonpublic information concerning the Company, or from tipping material nonpublic information to others. These laws impose severe sanctions on individuals who violate them. In addition, the Securities and Exchange Commission (the “SEC”) has the authority to impose large fines on the Company and on the Company’s Directors, Executive Officers and controlling stockholders if the Company’s employees engage in insider trading and the Company has failed to take appropriate steps to prevent it (so-called “controlling person” liability).

This insider trading policy is being adopted in light of these legal requirements, and with the goal of helping:

- prevent inadvertent violations of the insider trading laws;
- avoid embarrassing proxy disclosure of reporting violations by persons subject to Section 16 of the Exchange Act;
- avoid even the appearance of impropriety on the part of those employed by, or associated with, the Company;
- protect the Company from controlling person liability; and
- protect the reputation of the Company, its Directors and its employees.

As detailed below, this policy applies to family members and certain other persons and entities with whom Directors and employees have relationships. However, nothing in this policy is applicable to transactions by the Company itself.

Each individual subject to this policy is responsible for complying with this policy in all respects and ensuring that any family member whose transactions are subject to this policy also complies. In all cases, the responsibility for determining whether an individual is in possession of material nonpublic information rests with that individual, and any action on the part of the Company, any Director, Executive Officer or any other employee of the Company pursuant to this insider trading policy (or otherwise) does not in any way constitute legal advice or insulate an individual from liability under applicable securities laws. For more information, please see “Limitation on Liability” below.

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## 1.2 What Type of Information is “Material”?

Information concerning the Company is considered material if there is a substantial likelihood that a reasonable shareholder would consider the information important in making an investment decision with respect to the Company’s securities. Stated another way, there must be a substantial likelihood that a reasonable shareholder would view the information as having significantly altered the “total mix” of information available about the Company. Material information can include positive or negative information about the Company. There is no bright-line standard for assessing materiality; rather, materiality is based on an assessment of all of the facts and circumstances and is often evaluated by enforcement authorities with the benefit of hindsight. While it is not possible to define all categories of material information, information concerning any of the following subjects, or the Company’s plans with respect to any of these subjects, would often be considered material:

- the Company’s revenues or earnings;
- a significant pending or proposed merger or acquisition involving the Company;
- a pending or proposed joint venture;
- a change in control of the Company;
- a significant change in the management or the Board of Directors of the Company;
- the public or private sale of a significant amount of securities of the Company;
- the Company’s decision to commence or terminate the payment of cash dividends;
- the establishment of a program to repurchase securities of the Company;
- a stock split;
- significant related party transactions;
- a default on outstanding debt of the Company, a bankruptcy filing or severe liquidity problems;
- pending or threatened significant litigation, or the resolution of such litigation;
- a new product release or a significant development, invention or discovery;
- the loss, delay or gain of a significant contract, sale or order or other important development regarding customers, collaborators or suppliers;

- a significant operational issue or investigation of a potential such issue, including cybersecurity incidents, product defects or losses, potential losses, breaches or unauthorized access to the Company’s property or assets, whether at its facilities or through its information technology infrastructure;
- a conclusion by the Company or a notification from its independent auditor that any of the Company’s previously issued financial statements should no longer be relied upon; or
- a change in or dispute with the Company’s independent auditor.

This list is illustrative only and is not intended to provide a comprehensive list of circumstances that could give rise to material information.

### 1.3 When is Information “Nonpublic”?

Information concerning the Company is considered nonpublic if it has not been disseminated in a manner making it available to investors generally.

Information will generally be considered nonpublic unless (1) the information has been disclosed in a press release, in a public filing made with the SEC (such as a Report on Form 10-K, Form 10-Q or Form 8-K), or through a news wire service or daily newspaper of wide circulation, and (2) a sufficient amount of time has passed so that the information has had an opportunity to be digested by the marketplace.

## 2. **PROHIBITIONS RELATING TO TRANSACTIONS IN THE COMPANY’S SECURITIES AND DISCLOSURE OF NONPUBLIC INFORMATION**

### 2.1 Covered Persons. This Section 2 applies to:

- all Directors;
- all employees (including Executive Officers);
- all family members of Directors and employees who share the same address as, or are financially dependent on, the Director or employee and any other person who shares the same address as the Director or employee (other than (x) an employee or tenant of the Director or employee or (y) another unrelated person whom the General Counsel determines should not be covered by this policy);
- all family members whose transactions in Company securities are directed by, or subject to the influence or control of, a Director or employee, regardless of whether those family members share the same address as, or are financially dependent on, the Director or employee;

- all corporations, limited liability companies, partnerships, trusts or other entities controlled by any of the above persons, unless the entity has implemented policies or procedures designed to ensure that such person cannot influence transactions by the entity involving Company securities; and
- any other person(s) whom the General Counsel determines should be subject to this policy.

## 2.2 Prohibition on Trading While Aware of Material Nonpublic Information.

- (a) Prohibited Activities. Except as provided in Section 4, no person or entity covered by Section 2 may:
- purchase, sell or donate any securities of the Company while he or she is aware of any material nonpublic information concerning the Company or recommend to another person that they do so;
  - tip or otherwise disclose to any other person any material nonpublic information concerning the Company if such person may misuse that information, such as by purchasing or selling Company securities or tipping that information to others;
  - purchase, sell or donate any securities of another company while he or she is aware of any material nonpublic information concerning such other company which he or she learned in the course of his or her service as a Director or employee of the Company or recommend to another person that they do so; or
  - tip or otherwise disclose to any other person any material nonpublic information concerning another company which he or she learned in the course of his or her service as a Director or employee of the Company if such person may misuse that information, such as by purchasing or selling securities of such other company or tipping that information to others.

(b) Application of Policy After Cessation of Service. If a person ceases to be a Director or employee of the Company at a time when he or she is aware of material nonpublic information concerning the Company, the prohibition on purchases, sales or donations of Company securities in Section 2.2(a) shall continue to apply to such person until that information has become public or is no longer material.

2.3 Prohibition on Pledges. No person or entity covered by this Section 2 may purchase Company securities on margin, borrow against Company securities held in a margin account, or pledge Company securities as collateral for a loan.

2.4 Prohibition on Short Sales, Derivative Transactions and Hedging Transactions. No person or entity covered by this Section 2 may engage in any of the following types of transactions with respect to Company securities:

- short sales, including short sales “against the box”; or
- purchases or sales of puts, calls or other derivative securities; or
- purchases of financial instruments (including prepaid variable forward contracts, equity swaps, collars and exchange funds) or other transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of Company securities.

**2.5 Confidentiality of Nonpublic Information.** Nonpublic information relating to the Company is the property of the Company and the unauthorized disclosure of information concerning the Company’s business or financial affairs is forbidden. In the event that any Director or employee receives a request from anyone outside the Company, such as a stock analyst, for information (particularly financial results and/or projections), the inquiry should be referred to the Company’s Chief Financial Officer, who is responsible for coordinating and overseeing the release of such information to the investing public, analysts and others in compliance with applicable laws and regulations.

**2.6 Prohibition Against Internet Disclosure.** Unless specifically authorized by the Company, no Director or employee may disclose Company nonpublic information on the Internet and more specifically in forums (such as “chatrooms”) where companies and their prospects are discussed. Examples of such forums include but are not limited to Yahoo! Finance, Silicon Investor and Motley Fool. Posts in such forums (even to correct inaccurate information about the Company) may result in the disclosure of material nonpublic information and may bring significant legal and financial risk to the Company. Any unauthorized Internet post made by a Director or employee, or with information supplied by a Director or employee, will be treated as a violation of this policy. Nothing in this Section shall be deemed to prohibit Company employees from engaging in any concerted activity protected by the rules and regulations of the National Labor Relations Board.

### **3. ADDITIONAL PROHIBITIONS APPLICABLE TO DIRECTORS, EXECUTIVE OFFICERS AND DESIGNATED EMPLOYEES**

**3.1 Covered Persons.** This Section 3 applies to:

- all Directors;
- all Executive Officers;
- all employees, other than Executive Officers, reporting directly to the Chief Executive Officer (“CEO Reports”);
- such other employees as are designated from time to time by the Board of Directors, the Chief Executive Officer, the Chief Financial Officer or the General Counsel as being subject to this Section 3 (the “Designated Employees”);
- all family members of Directors, Executive Officers, CEO Reports and Designated Employees who share the same address as, or are financially

dependent on, the Director, Executive Officer or Designated Employee and any other person who shares the same address as the Director, Executive Officer or Designated Employee (other than (x) an employee or tenant of the Director, Executive Officer or Designated Employee or (y) another unrelated person whom the General Counsel determines should not be covered by this policy);

- all family members whose transactions in Company securities are directed by, or subject to the influence or control of, a Director, Executive Officer, CEO Report or Designated Employee, regardless of whether those family members share the same address as, or are financially dependent on, the Director, Executive Officer, CEO Report or Designated Employee; and
- all corporations, limited liability companies, partnerships, trusts or other entities controlled by any of the above persons, unless the entity has implemented policies or procedures designed to ensure that such person cannot influence transactions by the entity involving Company securities.

### 3.2 Blackout Periods.

(a) Regular Blackout Periods. Except as provided in Section 4, no person or entity covered by this Section 3 may purchase, sell or donate any securities of the Company during the period beginning two weeks prior to the end of each fiscal quarter and ending upon the completion of the second full trading day after the public announcement of earnings for such quarter (a “regular blackout period”).

(b) Corporate News Blackout Periods. The Company may from time to time notify Directors, Executive Officers and other specified employees that an additional blackout period (a “corporate news blackout period”) is in effect in view of significant events or developments involving the Company. In such event, except as provided in Section 4, no such individual may purchase, sell or donate any securities of the Company during such corporate news blackout period or inform anyone else that a corporate news blackout period is in effect. (In this policy, regular blackout periods and corporate news blackout periods are each referred to as a “blackout period.”)

(c) Awareness of Material Non-Public Information when a Blackout Period is Not in Effect. Even if no blackout period is then in effect, if a person is aware of material nonpublic information the prohibitions contained in Section 2.2(a) apply.

### 3.3 Notice and Pre-Clearance of Transactions.

(a) Pre-Transaction Clearance. No Director, Executive Officer, or other employee as may be designated from time to time by the Board of Directors, the Chief Executive Officer, the Chief Financial Officer or the General Counsel as being subject to this Section 3.3 (each, a “Pre-Clearance Person”) may enter into a trading plan (as defined in Section 4.1 below), purchase, sell, give, donate or otherwise acquire or dispose of securities of the Company, other than in a transaction permitted under Section 4 below, without first obtaining written pre-clearance of the transaction or trading plan. Each Executive Officer (other than the Chief Executive Officer), CEO Report, and any other Pre-Clearance

Person who attends Chief Executive Officer staff meetings must obtain pre-clearance of a transaction or trading plan from the Chief Executive Officer. Each other Pre-Clearance Person must obtain pre-clearance for a transaction or trading plan from either the Chief Financial Officer or the General Counsel. A request for pre-clearance shall be made in accordance with the procedures established by the General Counsel. When making a pre-clearance request, the requestor should advise the Chief Executive Officer, the Chief Financial Officer or the General Counsel, as applicable, of the awareness of any material nonpublic information about the Company. The Chief Executive Officer, the Chief Financial Officer or the General Counsel, as applicable, shall have sole discretion to decide whether to clear any contemplated transaction or trading plan. All trades or trading plans that are pre-cleared must be effected within three business days of receipt of the pre-clearance unless a longer or shorter period has been specified by the Chief Executive Officer, the General Counsel, or the Chief Financial Officer, as applicable. A pre-cleared trading plan or trade (or any portion of a pre-cleared trade) that has not been effected during the three business day period must be pre-cleared again prior to execution. **Notwithstanding receipt of pre-clearance, if the Pre-Clearance Person becomes aware of material non-public information or becomes subject to a blackout period before the transaction or trading plan is effected, the transaction may not be completed.**

(b) Post-Transaction Notice. Each person or entity covered by this Section 3 who is subject to reporting obligations under Section 16 of the Exchange Act shall also notify the Chief Financial Officer or the General Counsel (or his or her designee) of the occurrence of any purchase, sale, gift, donation or other acquisition or disposition of securities of the Company as soon as possible following the transaction, but in any event within one business day after the transaction. Such notification may be oral or in writing (including by e-mail) and should include the identity of the covered person, the type of transaction, the date of the transaction, the number of shares involved and the purchase or sale price.

(c) Deemed Time of a Transaction. For purposes of this Section 3.3, a purchase, sale, gift, donation or other acquisition or disposition shall be deemed to occur at the time the person becomes irrevocably committed to it (for example, in the case of an open market purchase or sale, this occurs when the trade is executed, not when it settles).

#### 4. EXCEPTIONS

4.1 Exceptions. The prohibitions in Sections 2.2(a) and 3.2 on purchases, sales and donations of Company securities do not apply to:

- exercises of stock options or other equity awards or the surrender of shares to the Company in payment of the exercise price or in satisfaction of any tax withholding obligations, in each case in a manner permitted by the applicable equity award agreement; provided, however, that the securities so acquired may not be sold (either outright or in connection with a “cashless” exercise transaction through a broker) while the person is aware of material nonpublic information or during an applicable blackout period;
- acquisitions or dispositions of Company common stock under the Company’s 401(k) or other individual account plan that are made pursuant to standing

instructions not entered into or modified while the person is aware of material nonpublic information or during an applicable blackout period;

- other purchases of securities from the Company (including purchases under the Company’s Employee Stock Purchase Plan) or sales of securities to the Company; provided, however, that if the transaction involves the exercise of stock options or other equity awards, the transaction must be permitted by the first bullet above; and
- bona fide gifts, unless the donor has reason to believe that the recipient intends to sell the securities while the donor is aware of material nonpublic information or during an applicable blackout period;
- purchases or sales made pursuant to a binding contract, written plan or specific instruction (a “trading plan”) which is adopted and operated in compliance with Rule 10b5-1; provided that such trading plan: (1) is in writing; (2) was submitted to the Company for review by the Company prior to its adoption; (3) was not adopted while the person was aware of material nonpublic information or during an applicable blackout period; (4) either specifies the amount, pricing, and timing of transactions in advance or delegates discretion on these matters to an independent third party; and (5) was adopted in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b5-1; and provided further that: (i) overlapping plans that would not be permitted under Rule 10b5-1 are prohibited; (ii) more than one single-trade plan in any 12-month period is prohibited unless permitted under Rule 10b5-1; (iii) the person adopting the trading plan acts in good faith with respect to the plan; (iv) for Directors and Executive Officers, any trade under such trading plan shall not occur until at least the later of (a) 90 days following trading plan adoption or modification of the amount, price, or timing of the purchase or sale of securities in the trading plan (each a “Material Modification”), or (b) two business days following the disclosure of the Company’s financial results on form 10-Q or 10-K for the fiscal quarter in which the trading plan was adopted or subject to a Material Modification (but not to exceed 120 days); and (v) for any persons other than Directors and Executive Officers, any trade under such trading plan shall not occur until at least 30 days following trading plan adoption or Material Modification. Directors and Executive Officers must include a representation in their Rule 10b5-1 plan certifying that: (i) they are not aware of any material nonpublic information; and (ii) they are adopting the plan in good faith and not as part of a plan or scheme to evade the prohibitions in Rule 10b-5.

4.2 Partnership Distributions. Nothing in this policy is intended to limit the ability of a venture capital partnership or other similar entity with which a Director is affiliated to distribute Company securities to its partners, members or other similar persons. It is the responsibility of each affected Director and the affiliated entity, in consultation with their own counsel (as appropriate), to

determine the timing of any distributions, based on all relevant facts and circumstances and applicable securities laws.

4.3 Underwritten Public Offering. Nothing in this policy is intended to limit the ability of any person to sell Company securities as a selling stockholder in an underwritten public offering pursuant to an effective registration statement in accordance with applicable securities law.

## 5. **REGULATION BTR**

If the Company is required to impose a “pension fund blackout period” under Regulation BTR, each Director and Executive Officer shall not, directly or indirectly sell, purchase or otherwise transfer during such blackout period any equity securities of the Company acquired in connection with his or her service as a director or officer of the Company, except as permitted by Regulation BTR.

## 6. **PENALTIES FOR VIOLATION**

Violation of any of the foregoing rules is grounds for disciplinary action by the Company, including termination of employment. In addition to any disciplinary actions the Company may take, insider trading can also result in administrative, civil or criminal proceedings which can result in significant fines and civil penalties, being barred from service as an officer or director of a public company, or imprisonment.

## 7. **COMPANY ASSISTANCE AND EDUCATION**

7.1 Education. The Company shall take reasonable steps designed to ensure that all Directors and employees of the Company are educated about, and periodically reminded of, the federal securities law restrictions and Company policies regarding insider trading.

7.2 Assistance. The Company shall provide reasonable assistance to all Directors and Executive Officers, as requested by such Directors and Executive Officers, in connection with the filing of Forms 3, 4 and 5 under Section 16 of the Exchange Act. However, the ultimate responsibility, and liability, for timely filing remains with the Directors and Executive Officers.

7.3 Limitation on Liability. None of the Company, the Chief Executive Officer, the Chief Financial Officer, the General Counsel or the Company’s other employees will have any liability for any delay in reviewing, or refusal of, a request to allow a pledge submitted pursuant to Section 2.3, a request for pre-clearance submitted pursuant to Section 3.3(a) or a trading plan submitted pursuant to Section 4.1. Notwithstanding any pre-clearance of a transaction or trading plan pursuant to Section 3.3(a) or review of a trading plan pursuant to Section 4.1, none of the Company, the Chief Executive Officer, the Chief Financial Officer, the General Counsel, or any of the Company’s other employees or any Director assumes any liability for the legality or consequences of such transaction or trading plan to the person engaging in or adopting such transaction or trading plan.

**SUBSIDIARIES**

<b><u>Name</u></b>	<b><u>Jurisdiction</u></b>
Rudolph Technologies, Inc.	U.S.A.
4D Technology Corporation	U.S.A.
Inspectrology LLC	U.S.A.
Onto Innovation Japan Co. Ltd.	Japan
Onto Innovation (Shanghai) Trading Co., Ltd.	China
Onto Innovation Germany GmbH	Germany
Onto Innovation Hong Kong Limited	Hong Kong
Onto Innovation Europe, B.V.	Netherlands
Onto Innovation Switzerland GmbH	Switzerland
Onto Innovation Korea Ltd.	Korea
Onto Innovation Southeast Asia Pte. Limited	Singapore
Onto Innovation Ireland Limited	Ireland
Onto Innovation Malaysia Sdn. Bhd.	Malaysia
Onto Innovation Vietnam PTE Company Limited	Vietnam
Neta SAS	France
Liteq B.V.	Netherlands
Lumina Instruments Inc.	U.S.A.

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**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-238492) pertaining to the Onto Innovation Inc. 2020 Employee Stock Purchase Plan.

of our reports dated February 25, 2025, with respect to the consolidated financial statements of Onto Innovation Inc. and the effectiveness of internal control over financial reporting of Onto Innovation Inc. included in this Annual Report (Form 10-K) of Onto Innovation Inc. for the year ended December 28, 2024.

/s/ Ernst & Young LLP

Iselin, New Jersey  
February 25, 2025

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**Rule 13a-14(a) Certification of Chief Executive Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Michael P. Plisinski, certify that:

1. I have reviewed this annual report on Form 10-K of Onto Innovation 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 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 control 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; and
  - 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 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 control 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 25, 2025

By: /s/ Michael P. Plisinski  
**Michael P. Plisinski**  
**Chief Executive Officer**

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**Rule 13a-14(a) Certification of Chief Financial Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Mark R. Slicer, certify that:

1. I have reviewed this annual report on Form 10-K of Onto Innovation 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 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 control 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; and
  - 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 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 control 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 25, 2025

By: /s/ Mark R. Slicer

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**Mark R. Slicer**  
**Chief Financial Officer**

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

I, Michael P. Plisinski, 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 Onto Innovation Inc. on Form 10-K for the year ended December 28, 2024 fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Onto Innovation Inc.

Date: February 25, 2025

By: /s/ Michael P. Plisinski  
**Michael P. Plisinski**  
**Chief Executive Officer**

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**CERTIFICATION OF 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, Mark R. Slicer, 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 Onto Innovation Inc. on Form 10-K for the year ended December 28, 2024 fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Onto Innovation Inc.

Date: February 25, 2025

By: /s/ Mark R. Slicer

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**Mark R. Slicer**  
**Chief Financial Officer**