**Risk Factors Comparison 2023-12-12 to 2022-12-12 Form: 10-K**

**Legend: New Text** ~~Removed Text~~ Unchanged Text Moved Text Section

A description of the risk factors associated with our business is set forth below. Some of these risks are highlighted in the following discussion, and in Management' s Discussion and Analysis of Financial Condition and Results of Operations, Legal Proceedings, and Quantitative and Qualitative Disclosures About Market Risk. The occurrence of any of these risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, **operating results,** financial condition, ~~operating results~~ and stock price. These risks and uncertainties could cause our actual results to differ materially from the results contemplated by the forward- looking statements contained in this report. Investors should carefully consider all relevant risks and uncertainties before investing in our common stock. Industry Risks Uncertainty in the ~~global economy~~ **macroeconomic environment** , and its potential impact on the semiconductor and electronics industries, may negatively affect our business, operating results and financial condition. Uncertainty ~~caused by~~ **in the macroeconomic environment, including the effects of, among** ~~the~~ **other** ~~recent challenging~~ **things, increased global inflationary pressures and interest rates, potential economic slowdowns or recessions, supply chain disruptions, geopolitical pressures, fluctuations in foreign exchange rates and associated** global economic conditions **have resulted** ~~, including due to the effects of the recent rise~~ in **volatility in credit** ~~inflation and interest rates and the continuing COVID- 19 pandemic~~ , **equity and foreign currency markets. This uncertain macroeconomic environment** could lead some of our customers to postpone their decision- making, decrease their spending and / or delay their payments to us. Such caution by customers could, among other things, limit our ability to maintain or increase our sales or recognize revenue from committed contracts. **For example, we continue to experience an impact from the current macroeconomic environment in our Software Integrity segment as customers have applied elevated levels of scrutiny to purchasing decisions due in part to their own budget uncertainty, which has, in some cases, affected customer order size, pricing and / or contract duration. On November 29, 2023, we announced that we have decided to explore strategic alternatives for our Software Integrity segment. As a part of this process, our management is considering a full range of strategic opportunities. At this time we cannot predict the impact that such strategic alternatives might have on our business, operations or financial condition. This announcement and uncertainty could have a number of negative effects on our current business, including potentially disrupting our regular operations, diverting the attention of our workforce and management team and increasing undesired workforce turnover. It could also disrupt existing business relationships, make it harder to develop new business relationships, or otherwise negatively impact the way that we operate our business, which could negatively impact our business, operating results or financial condition. If these macroeconomic uncertainties persist and** ~~Economic~~ **economic** conditions ~~could~~ continue to deteriorate ~~in~~ **,** ~~the~~ **then** ~~future, and, in particular,~~ the semiconductor and electronics industries could fail to grow **. Additionally** , ~~including as~~ **uncertain macroeconomic conditions could also have the effect of increasing other risks and uncertainties facing our business, which could have** a **material adverse** ~~result of the effects~~ **effect on** ~~of, among other things, rising inflation and interest rates, a sustained global semiconductor shortage, supply chain disruptions, the COVID- 19 pandemic, and any disruption of international trade relationships such as tariffs, export licenses or~~ **our** ~~other government trade restrictions~~ **operating results and financial condition** . ~~Furthermore,~~ **Such risks that may be heightened by uncertain macroeconomic conditions could include** China' s stated policy of becoming a global leader in the semiconductor industry may lead to increased competition ~~and~~ **or** further disruption of international trade relationships, including, but not limited to, additional government trade restrictions. For more on risks related to government export and import restrictions such as the U. S. government' s Entity List and Export Regulations (as defined below), see " Industry Risks – We are subject to governmental export and import requirements that could subject us to liability and restrict our ability to sell our products and services, which could impair our ability to compete in international markets. " Adverse economic conditions affect demand for devices that our products help create, such as the ICs incorporated in personal computers, smartphones, automobiles and servers. Longer- term reduced demand for these or other products could result in reduced demand for design solutions and significant decreases in our average selling prices and product sales over time. Future economic downturns could also adversely affect our business **, operating results and financial condition** . In addition, if our customers or distributors build elevated inventory levels, we could experience a decrease in short- term and / or long- term demand for our products. If any of these events or disruptions were to occur, the demand for our products and services could be adversely affected along with our business, operating results and financial condition. Further, the negative impact of these events or disruptions may be deferred due to our business model. Further economic instability could also adversely affect the banking and financial services industry and result in **bank failures or** credit downgrades of the banks we rely on for foreign currency forward contracts, credit and banking transactions, and deposit services, or cause them to default on their obligations. Additionally, the banking and financial services industries are subject to complex laws and are heavily regulated. There is uncertainty regarding how proposed, contemplated or future changes to the laws, policies and regulations governing our industry, the banking and financial services industry and the economy could affect our business, including ~~rising~~ **increased** global interest rates **and global inflationary pressure** . A deterioration of conditions in worldwide credit markets could limit our ability to obtain external financing to fund our operations and capital expenditures. In addition, difficult economic conditions may also result in a higher rate of losses on our accounts receivable due to credit defaults. Any of the foregoing could cause adverse effects on our business, operating results and financial condition, and could cause our stock price to decline. The growth of our business depends primarily on the semiconductor and electronics industries. The growth of the EDA industry as a whole, **sales in** our ~~Semiconductor & System~~

Design **Automation and Design IP** ~~segment~~ **segments** ~~product sales~~ , and, to some extent, our Software Integrity segment ~~product~~ sales ~~,~~ are dependent on the semiconductor and electronics industries. A substantial portion of our business and revenue depends upon the commencement of new design projects by semiconductor manufacturers, systems companies and their customers. The increasing complexity of designs of SoCs, ICs, electronic systems and customers' concerns about managing costs have previously led to, and in the future could lead to, a decrease in design starts and design activity in general. For example, in response to this increasing complexity, some customers may choose to focus on one discrete phase of the design process or opt for less advanced, but less risky, manufacturing processes that may not require the most advanced EDA products. Demand for our products and services could decrease and our **business,** financial condition and **operating** results ~~of operations~~ could be adversely affected if growth in the semiconductor and electronics industries slows or stalls, including due to **increased** ~~rising inflation and~~ global **inflationary pressures and** interest rates, a continued or worsening global supply chain disruption, **geopolitical pressures** or **economic slowdowns or recessions** ~~the impact of the COVID- 19 pandemic~~ . Additionally, as the EDA industry has matured, consolidation has resulted in stronger competition from companies better able to compete as sole source vendors. This increased competition may cause our revenue growth rate to decline and exert downward pressure on our operating margins, which ~~may~~ **would** have an adverse effect on our business and financial condition. Furthermore, the semiconductor and electronics industries have become increasingly complex **and interconnected** ecosystems. Many of our customers outsource the manufacturing of their semiconductor designs to foundries. Our customers also frequently incorporate third- party IP, whether provided by us or other vendors, into their designs to improve the efficiency of their design process. We work closely with major foundries to ensure that our EDA, IP and manufacturing solutions are compatible with their manufacturing processes. Similarly, we work closely with other major providers of semiconductor IP, particularly microprocessor IP, to optimize our EDA tools for use with their IP designs and to assure that their IP and our own IP products work effectively together, as we may each provide for the design of separate components on the same chip. If we fail to optimize our EDA and IP solutions for use with major foundries' manufacturing processes or major IP providers' products, or if our access to such foundry processes or third- party IP products is hampered, then our solutions may become less desirable to our customers, resulting in an adverse effect on our business and financial condition. We operate in highly competitive industries, and if we do not continue to meet our customers' demand for innovative technology at lower costs, our products may not be competitive or may become obsolete. In our ~~Semiconductor & System~~ Design **Automation** segment, we compete against EDA vendors that offer a variety of products and services, such as Cadence Design Systems, Inc. and Siemens EDA. We also compete with other EDA vendors, including new entrants to the marketplace, that offer products focused on one or more discrete phases of the IC design process. Moreover, our customers internally develop design tools and capabilities that compete with our products ~~, including internal~~ **. In our** ~~designs~~ - **Design** ~~that compete with our~~ IP **segment** ~~products. In the area of IP products~~ , we compete against a growing number of **silicon** IP providers as well as our customers' internally developed IP. In our Software Integrity segment, we compete with ~~numerous~~ other solution providers, many of which focus on specific aspects of software security or quality analysis. We also compete with frequent new entrants, which include start- up companies and more established software companies. The industries in which we operate are highly competitive, with new competitors entering these markets both domestically and internationally. For example, China has implemented national policies **favoring Chinese companies** and **has formed government- backed** investment funds ~~to try~~ **as it seeks** to build independent EDA capabilities and compete internationally in the semiconductor industry. The demand for our products and services is dynamic and depends on a number of factors, including **, among other things,** demand for our customers' products, design starts and our customers' budgetary constraints. Technology in these industries evolves rapidly and is characterized by frequent product introductions and improvements as well as changes in industry standards and customer requirements. For example, the adoption of cloud computing and artificial intelligence **(AI)** technologies can bring new ~~demands~~ - **demand** and also challenges in terms of disruption to both business models and our existing technology offerings **. Our efforts in developing such new technology solutions, including, for example, our current efforts in creating cloud computing and AI solutions, may not succeed** . Semiconductor device functionality requirements continually increase while feature widths decrease, **which** substantially ~~increasing~~ **increases** the complexity, cost and risk of chip design and manufacturing. At the same time, our customers and potential customers continue to demand **a** ~~an overall~~ lower total cost of design, which can lead to the consolidation of their purchases ~~with~~ **from** one vendor. In order to succeed in this environment, we must successfully meet our customers' technology requirements and increase the value of our products, while also striving to reduce their overall costs and our own operating costs. We compete principally on the basis of technology, product quality and features (including ease- of- use), license or usage terms, post- contract customer support, interoperability among products **,** and price and payment terms. Specifically, we believe the following competitive factors affect our success: • Our ability to anticipate and lead critical development cycles and technological shifts, innovate rapidly and efficiently, improve our existing software and hardware products **,** and successfully develop or acquire such new products; • Our ability to offer products that provide both a high level of integration into a comprehensive platform and a high level of individual product performance; • Our ability to enhance the value of our offerings through more favorable terms such as expanded license usage, future purchase rights, price discounts and other differentiating rights, such as multiple tool copies, post- contract customer support, " re- mix " rights that allow customers to exchange the software they initially licensed for other Synopsys products **,** and the ability to purchase pools of technology; • Our ability to manage an efficient supply chain to ensure **hardware product** availability ~~of hardware products~~ ; • Our ability to compete on the basis of payment terms; and • Our ability to provide engineering and design consulting for our products. If we fail to successfully manage **any of** these competitive factors, fail to successfully balance the conflicting demands for innovative technology and lower overall costs, or fail to address new competitive forces, our business **, operating results** and financial condition will be adversely affected. We are subject to export controls, laws and regulations that restrict selling, shipping or transmitting certain of our products and services and transferring certain of our technology outside the United States. These requirements also restrict domestic release of software and technology to certain foreign nationals. In addition, we are subject to customs and other import requirements that regulate imports that may be important for our business. If we fail to comply with the U. S. Export Administration Regulations or other U. S. or non- U. S. export requirements (collectively, the Export Regulations), we could be subject to substantial civil and criminal penalties, including fines for the company and the possible loss of the ability to engage in exporting and other international transactions. Due to the nature of our business and technology, the Export Regulations may also subject us to governmental inquiries regarding transactions between us and certain foreign entities. For example, we have received administrative subpoenas from the U. S. Bureau of Industry and Security (the BIS) requesting production of information and documentation relating to transactions with certain Chinese entities. We believe that we are in full compliance with all applicable regulations and are working with the BIS to respond to its subpoenas. However, we cannot predict the outcome of the inquiries or their potential effect on our operations or financial condition. We believe that ~~current~~ **the** Export Regulations do not materially impact our business at this time, but we cannot predict the impact that additional regulatory changes may have on our business in the future. The United States has published significant changes to **the** Export Regulations with respect to Russia and China, and we anticipate additional changes to the Export Regulations in the future. For example, the United States government has implemented controls on advanced computing ICs, computer commodities that contain such ICs, and certain semiconductor manufacturing items, as well as controls on transactions involving items for supercomputer and semiconductor manufacturing end- users. The ~~new~~ controls expand the scope of foreign- produced items subject to license requirements for certain entities on the U. S. government' s Entity List. Future changes ~~in~~ **to** the Export Regulations, including changes in the enforcement and scope of such regulations, may create delays in the introduction of our products or services in international markets or could prevent our customers with international operations from deploying our products or services globally. In some cases, such changes could prevent the export or import of our products. Consolidation among our customers and within the industries in which we operate, as well as our dependence on a relatively small number of large customers, may negatively impact our operating results. A number of business combinations and strategic partnerships among our customers in the semiconductor and electronics industries have occurred over the last several years, and more could occur in the future. Consolidation among our customers could lead to fewer customers or the loss of customers, increased customer bargaining power or reduced customer spending on software and services. Further, we depend on a relatively small number of large customers, and on such customers continuing to renew licenses and purchase additional products from us, for a large portion of our revenues. Consolidation among our customers could also reduce demand for our products and services if customers streamline research and development or operations, or reduce or delay purchasing decisions. Reduced customer spending or the loss of customers, particularly our large customers, could adversely affect our business **, operating results** and financial condition. In addition, we and our competitors may acquire businesses and technologies to complement and expand our respective product offerings. Consolidated competitors could have considerable financial resources and channel influence as well as broad geographic reach, which ~~would~~ **may** enable them to be more competitive in **, among other things,** product differentiation, **breadth of** ~~pricing, marketing, services, support and more. If our competitors consolidate or acquire businesses and technologies that we do not offer, they may be able to offer a larger~~ technology portfolio, ~~additional~~ **pricing, marketing, services or** support ~~and service capability~~ **. Such consolidations** or **acquisitions** ~~lower prices, which~~ could negatively impact our business ~~and~~ **,** operating results **and financial condition** . Business Operations Risks The global nature of our operations exposes us to increased risks and compliance obligations ~~that may adversely affect our business~~ . We derive roughly half of our revenue from sales outside the United States, and we expect our orders and revenue to continue to depend on sales to customers outside the U. S. We have also continually expanded our non- U. S. operations. This strategy requires us to recruit and retain qualified technical and managerial employees, manage multiple remote locations performing complex software development projects **,** and ensure intellectual property protection outside of the U. S. Our international operations and sales subject us to a number of increased risks, including: • ~~Ineffective~~ **Economic slowdowns, recessions** or ~~weaker legal protection~~ **uncertainty in financial markets, including, among other things, the impact** of ~~intellectual property rights~~ **increased global inflationary pressures and interest rates** ; • Uncertain economic, legal and political conditions in China, Europe and other regions where we do business, including, for example, changes in China- Taiwan relations, ~~the~~ **regional or global** military ~~conflict~~ **conflicts ,** ~~between Russia~~ and ~~Ukraine and the~~ related sanctions and ~~other~~ **financial** penalties imposed on **participants** ~~Russia by the United States, the European Union, the United Kingdom and other countries; • Economic recessions or uncertainty~~ in **such conflicts** ~~financial markets, including the impact of rising inflation and global interest rates~~ ; • Government trade restrictions, including tariffs, export controls or other trade barriers, and changes to existing trade arrangements ~~between various countries such as China~~ **, including the unknown impact of current and future U. S. and Chinese trade regulations; • Ineffective or weaker legal protection of intellectual property rights** ; • Difficulties in adapting to cultural differences in the conduct of business, which may include business practices in which we are prohibited from engaging by the Foreign Corrupt Practices Act or other anti- corruption laws; • Financial risks such as longer payment cycles, changes in currency exchange rates and difficulty in collecting accounts receivable; • Inadequate local infrastructure that could result in business disruptions; • Additional taxes, interest and potential penalties and uncertainty around changes in tax laws of various countries; and • Other factors beyond our control such as natural disasters, terrorism, civil unrest, war and infectious diseases and pandemics, ~~including~~ **such as the** COVID- 19 **pandemic** ~~and its variants~~ . Furthermore, if any of the foreign economies in which we do business deteriorate or if we fail to effectively manage our global operations, our business and **operating** results ~~of operations~~ will be harmed. There is inherent risk, based on the complex relationships between certain Asian countries such as China, where we derive a growing percentage of our revenue, and the United States, that political, diplomatic or military events could result in trade disruptions, including tariffs, trade embargoes, export restrictions and other trade barriers. A significant trade disruption, export restriction, or the establishment or increase of any trade barrier in any area where we do business could reduce customer demand and cause customers to search for substitute products and services, make our products and services more expensive or unavailable for customers, increase the cost of our products and services, have a negative impact on customer confidence and spending, make our products less competitive, or otherwise have a materially adverse impact on our **backlog,** future revenue and profits, our customers' and suppliers' ~~businesses~~ -- **business** , **operating** ~~and our~~ results ~~of operations~~ **and financial condition** . For example **and as described above** , the ongoing geopolitical and economic uncertainty between the U. S. and China, the unknown impact of current and future U. S. and Chinese trade regulations ~~as described above~~ , and other geopolitical risks with respect to China and Taiwan may cause disruptions in the markets and industries we serve and our supply chain, ~~decrease~~ **decreased** demand from customers for products using our solutions or ~~cause~~ other disruptions **,** which could, directly or indirectly, materially harm our business, **operating results and** financial condition ~~and results of operations~~ . For more on risks related to government export and import restrictions such as the U. S. government' s Entity List and **the** Export Regulations see " Industry Risks – We are subject to governmental export and import requirements that could subject us to liability and restrict our ability to sell our products and services, which could impair our ability to compete in international markets. " In response to the U. S. adopting tariffs and trade barriers or taking other actions, other countries may also adopt tariffs and trade barriers that could limit our ability to offer our products and services. Current and potential customers who are concerned or affected by such tariffs or restrictions may respond by developing their own products or replacing our solutions, which would have an adverse effect on our business. In addition, government or customer efforts, attitudes, laws or policies regarding technology independence may lead to non- U. S. customers favoring their domestic technology solutions that could compete with or replace our products, which would also have an adverse effect on our business. In addition to tariffs and other trade barriers, our global operations are subject to numerous U. S. and foreign laws and regulations such as those related to anti- corruption, tax, corporate governance, imports and exports, financial and other disclosures, privacy and labor relations. These laws and regulations are complex and may have differing or conflicting legal standards, making compliance difficult and costly. In addition, there is uncertainty regarding how proposed, contemplated or future changes to these complex laws and regulations could affect our business. We may incur substantial expense in complying with the new obligations to be imposed by these laws and regulations, and we may be required to make significant changes in our business operations, all of which may adversely affect our revenues and our business overall. If we violate these laws and regulations, we could be subject to fines, penalties or criminal sanctions, and may be prohibited from conducting business in one or more countries. ~~Although we have implemented policies and procedures to help ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, agents or partners will not violate such laws and regulations.~~ Any violation individually or in the aggregate could have a material adverse effect on our operations and financial condition. Our financial results are also affected by fluctuations in foreign currency exchange rates. A weakening U. S. dollar relative to other currencies increases expenses of our foreign subsidiaries when they are translated into U. S. dollars in our consolidated statements of income. Likewise, a strengthening U. S. dollar relative to other currencies, including the renminbi or Yen, reduces revenue of our foreign subsidiaries upon translation and consolidation. Exchange rates are subject to significant and rapid fluctuations due to a number of factors, including interest rate changes and political and economic uncertainty. Therefore, we cannot predict the prospective impact of exchange rate fluctuations. **We** ~~Although we engage in foreign currency hedging activity, we~~ may be unable to hedge all of our foreign currency risk, which could have a negative impact on our **operating** results ~~of operations. The ongoing COVID- 19 pandemic could have a material adverse effect on our business, operations and financial condition. The ongoing COVID- 19 pandemic has caused minor disruptions to our business operations to date, but could have a material adverse effect on our business, operations and financial condition in the future. For example, we have previously experienced limited hardware supply chain and logistical challenges as well as a slowdown in customer commitments in our Software Integrity segment. In response to the COVID- 19 pandemic, governments and businesses imposed restrictions, which significantly curtailed global, regional and national economic activity and have caused substantial volatility and disruption in global financial markets. We are continuing to transition employees back into offices worldwide while maintaining compliance with applicable local, state and national requirements. Although we have been able to navigate workplace restrictions and limitations with minimal disruptions to our business operations to date, we cannot be certain that these measures will continue to be successful and we may need to further modify our business practices and real estate needs in response to the risks and negative impacts caused by the COVID- 19 pandemic. The extent to which the COVID- 19 pandemic impacts our business operations in future periods will depend on multiple uncertain factors, including the duration and scope of the pandemic, its overall negative impact on the global economy and, in some cases, the regional and national economies of areas experiencing localized surges in COVID- 19 cases, continued responses by governments and businesses to COVID- 19 and its variants, acceptance and effectiveness of vaccines, the ability of our business partners and third- party providers to fulfill their responsibilities and commitments, the ability to secure adequate and timely supply of equipment and materials from suppliers for our hardware products, and the ability to develop and deliver our products. In addition, continued and worsening weak economic conditions may result in impairment in value of our tangible and intangible assets. The impact of the ongoing COVID- 19 pandemic may also have the effect of heightening many of the other risks and uncertainties described in this Risk Factors section~~ . Our operating results may fluctuate in the future, which may adversely affect our stock price. Our operating results are subject to quarterly and annual fluctuations, which may adversely affect our stock price. Our historical results should not be viewed as indicative of our future performance due to these periodic fluctuations. Many factors may cause our **backlog,** revenue or earnings to fluctuate, including **, among other things** : • Changes in demand for our products — especially products, such as hardware, generating upfront revenue — due to fluctuations in demand for our customers' products and due to constraints in our customers' budgets for research and development and EDA products and services; • Changes in demand for our products due to customers reducing their expenditures, whether as a cost- cutting measure or a result of their insolvency or bankruptcy, and whether due to **increased global** inflationary pressures **and** ~~, rising global~~ interest rates ~~,~~ **and** a sustained global semiconductor shortage ~~, the ongoing COVID- 19 pandemic~~ or other reasons; • Product competition in the EDA industry, which can change rapidly due to industry or customer consolidation and technological innovation; • Our ability to innovate and introduce new products and services or effectively integrate products and technologies that we acquire; • Failures or delays in completing sales due to our lengthy sales cycle, which often includes a substantial customer evaluation and approval process because of the complexity of our products and services; • Our ability to implement effective cost control measures; • Our dependence on a relatively small number of large customers, and on such customers continuing to renew licenses and purchase additional products from us, for a large portion of our revenue; • Changes to the amount, composition and valuation of, and any impairments to or write- offs of, our ~~inventory~~ **assets or strategic investments** ; • Changes in the mix of our products sold, as increased sales of our products with lower gross margins, such as our hardware products, may reduce our overall margins; • Expenses related to our acquisition and integration of businesses and technologies; • Changes in tax rules, as well as changes to our effective tax rate, including the tax effects of infrequent or unusual transactions and tax audit settlements; • Delays, increased costs or quality issues resulting from our reliance on third parties to manufacture our hardware products, which includes a sole supplier for certain hardware components; • Natural variability in the timing of IP drawdowns, which can be difficult to predict; • General economic and political conditions that affect the semiconductor and electronics industries, such as disruptions to international trade relationships, including tariffs, export licenses, or other trade barriers affecting our or our suppliers' products ~~, as well as impacts due to the ongoing COVID-19 pandemic~~ ; and • Changes in accounting standards, which may impact the way we recognize our revenue and costs and impact our earnings. The timing of revenue recognition may also cause our revenue and earnings to fluctuate. The timing of revenue recognition is affected by factors that include: • Cancellations or changes in levels of orders or the mix between upfront products revenue and time- based products revenue; • Delay of one or more orders for a particular period, particularly orders generating upfront products revenue, such as hardware; • Delay in the completion of professional services projects that require significant modification or customization and are accounted for using the percentage of completion method; • Delay in the completion and delivery of IP products in development as to which customers have paid for early access; • Customer contract amendments or renewals that provide discounts or defer revenue to later periods; and • The levels of our hardware and IP revenues, which are recognized upfront and are primarily dependent upon our ability to provide the latest technology and meet customer requirements. These factors, or any other factors or risks discussed herein, could negatively impact our **backlog,** revenue or earnings and cause our stock price to decline. Additionally, our results may fail to meet or exceed the expectations of securities analysts and investors, or such analysts may change their recommendation regarding our stock, which could cause our stock price to decline. Our stock price has been, and may continue to be, volatile, which may make it more difficult for our stockholders to sell their shares at a time or a price that is favorable to them. Cybersecurity threats or other security breaches could compromise sensitive information belonging to us or our customers and could harm our business and our reputation, particularly that of our security testing solutions. We store sensitive data, including intellectual property, our proprietary business information and that of our customers, and **personal** ~~confidential employee~~ information, in our data centers, on our networks or on the cloud. ~~These~~ **In addition, our operations depend upon our information technology (IT)** systems **. We maintain a variety of information security policies, procedures, and controls to protect our business and proprietary information, prevent data loss and other security breaches and incidents, keep our IT systems operational and reduce the impact of a security breach or incident, but these securities measures cannot provide and have not provided absolute security. In the normal course of business, our systems are and have been the target of malicious cyber attack attempts and have been and** may be ~~vulnerable~~ **subject** to ~~attacks by hackers or compromised~~ - **compromise** due to employee error, malfeasance or other disruptions that **have and** could result in unauthorized disclosure or loss of sensitive information **. To date, we have not identified material cyber security incidents or incurred any material expenses with any incidents. However, any breach or compromise could adversely impact our business and operations, expose us or our customers to litigation, investigations, loss of data, increase costs, or result in loss of customer confidence and damage to our reputation, any of which could adversely affect our business and our ability to sell our products and services. Industry incidences of cyberattacks and other cybersecurity breaches have increased and are likely to continue to increase. We are using an increasing number of third- party software solutions, including cloud- based solutions, which increase potential threat vectors, such as by exploitation of misconfigurations or vulnerabilities. We also use third- party vendors that provide software or hardware, have access to our network, and / or store sensitive data, and these third parties are subject to their own cybersecurity threats. Our standard vendor terms and conditions include provisions requiring the use of appropriate security measures to prevent unauthorized use or disclosure of our data, as well as other safeguards. Despite these measures, there is no guarantee that a compromise of our third- party vendors will not occur and in turn result in a compromise of our own IT systems or data. In addition, if we select a vendor that uses cloud storage as part of their service or product offerings, or if we are selected as a vendor for our cloud- based solutions, our proprietary information could be misappropriated by third parties despite our attempts to validate the security of such services** . Many employees continue to work remotely based on a hybrid work model, which magnifies the importance of maintaining the integrity of our remote access security measures. ~~For example~~ **We also periodically acquire new businesses with less mature security programs** , ~~we discovered unauthorized third- party access to our products~~ and ~~product license files hosted on our SolvNet Plus customer license and product delivery system in 2015. While we identified and remediated the incident,~~ it ~~is possible that our~~ **takes time to align their** security **practices to meet** ~~measures may be circumvented again in the future, and any such breach could adversely impact~~ our ~~business~~ **information security policies** , ~~operations~~ **procedures** and ~~reputation~~ **controls** . The techniques used to obtain unauthorized access to networks ~~,~~ or to sabotage systems ~~,~~ **of companies such as ours** change frequently and generally are not recognized until launched against a target. We may be unable to anticipate these **emerging** techniques, react in a timely manner **,** or implement adequate preventative measures ~~. Furthermore~~ , ~~in the operation of our~~ - **or we may not have sufficient logging available to fully investigate the incident. Our security measures vary in maturity across the** business **and may be and have been circumvented. For example,** we ~~also~~ **have identified instances**

**where employees have** ~~use~~ **used non- approved applications for business purposes, some of which do not meet our security standards. In addition, we discovered unauthorized** third- party ~~vendors that have~~ access to our ~~network~~ **products** and ~~store certain sensitive data, including confidential information about our employees, and these third parties are subject to their own cybersecurity threats. Our standard vendor terms and conditions include provisions requiring the use of appropriate security measures to prevent unauthorized use or disclosure of our data, as well as other safeguards. However, that is no guarantee that a breach will not still occur. In addition, if we select a vendor that uses cloud storage of information as part of their service or~~ product ~~offerings,~~ **license files hosted on** ~~or~~ **our SolvNet Plus customer license and product delivery system in 2015** ~~if we are selected as a vendor for our cloud- based solutions, our proprietary information could be misappropriated by third parties despite our attempts to validate the security of such services~~. Any security breach of our own or a third- party vendor' s systems could cause us to be non- compliant with applicable laws or regulations, subject us to legal claims or proceedings, disrupt our operations, damage our reputation, and cause a loss of confidence in our products and services, any of which could adversely affect our business and our ability to sell our products and services. Our software products, hosted solutions ~~,~~ and software security and quality testing solutions ~~may~~ **are** also **targeted by hackers and may** be **compromised by** ~~vulnerable to attacks~~ , ~~including~~ **among other things,** phishing, exploits of our code or our system configurations, malicious code (such as viruses and worms), distributed denial- of- service attacks, sophisticated attacks conducted or sponsored by nation- states, advanced persistent threat intrusions, ransomware and other malware. **We leverage many security best practices throughout the software development lifecycle, but our security development practices vary in maturity across the business and may not be effective against all cybersecurity threats.** Furthermore, ~~the risk of~~ **due to geopolitical incidents, including regional military conflicts,** state- supported and geopolitical- related cybersecurity incidents **against companies** ~~may increase due to geopolitical incidents,~~ such as **ours may increase** ~~the Russia- Ukraine conflict~~ . ~~An attack~~ **Attacks on our products** could **potentially** disrupt the proper functioning of our software, cause errors in the output of our customers' work, allow unauthorized access to our or our customers' proprietary information or cause other destructive outcomes. We also offer software security and quality testing solutions. If we fail to identify new and increasingly sophisticated methods of cyber attacks or fail to invest sufficient resources in research and development regarding new threat vectors, our security testing products and services may **not** ~~fail to~~ detect vulnerabilities in our customers' software code. An actual or perceived failure to ~~identify~~ **detect** security flaws may ~~harm~~ **negatively impact** the perceived reliability of our security testing products and services, and could result in a loss of customers or sales, or an increased cost to remedy a problem. Furthermore, our growth and recent acquisitions in the software security and quality testing space may increase our visibility as a security- focused company and may make us a more attractive target for attacks on our own **IT** ~~information technology~~ infrastructure. **As a result** ~~If any of the foregoing were to occur~~ , we could experience negative publicity and our reputation could suffer, customers could stop buying our products, we could face lawsuits and potential liability, and our **business, operating results and** financial ~~performance~~ **condition** could be negatively impacted. If we fail to protect our proprietary technology, our business will be harmed. Our success depends in part upon protecting our proprietary technology. Our efforts to protect our technology may be costly and unsuccessful. We rely on agreements with customers, employees and other third ~~-~~ parties as well as intellectual property laws worldwide to protect our proprietary technology. These agreements may be breached, and we may not have adequate remedies for any breach. Additionally, despite our measures to prevent piracy, other parties may attempt to illegally copy or use our products, which could result in lost revenue if their efforts are successful. Some foreign countries do not currently provide effective legal protection for intellectual property and our ability to prevent the unauthorized use of our products in those countries is therefore limited. Our trade secrets may also be stolen, otherwise become known, or be independently developed by competitors. From time to time, we may need to commence litigation or other legal proceedings in order to ~~: • Assert~~ **assert** claims of infringement of our intellectual property; ~~• Defend~~ **defend** our products from piracy; ~~• Protect~~ **protect** our trade secrets or know- how; or ~~• Determine~~ **determine** the enforceability, scope and validity of the propriety rights of others. If we do not obtain or maintain appropriate patent, copyright or trade secret protection ~~,~~ for any reason, or cannot fully defend our intellectual property rights in certain jurisdictions, our business and operating results would be harmed. In addition, intellectual property litigation is lengthy, expensive and uncertain. Legal fees related to such litigation will increase our operating expenses and may reduce our net income. We may not be able to realize the potential financial or strategic benefits of the ~~acquisitions~~ **transactions** we complete, or find suitable target businesses and technology to acquire, which could hurt our ability to grow our business, develop new products or sell our products **and services** . Acquisitions and strategic investments are an important part of our growth strategy. We have completed a significant number of acquisitions in recent years. We expect to make additional acquisitions and strategic investments in the future, but we may not find suitable acquisition or investment targets, or we may not be able to consummate desired acquisitions or investments due to unfavorable credit markets, commercially unacceptable terms **, failure to obtain regulatory approvals, competitive bid dynamics** or other risks, which could harm our operating results. Acquisitions and strategic investments are difficult, time- consuming, and pose a number of risks, including **, but not limited to** : • Potential negative impact on our earnings per share; • Failure of acquired products to achieve projected sales; • Problems in integrating the acquired products with our products; • Difficulties entering into new markets in which we are not experienced or where competitors may have stronger positions; • Potential downward pressure on operating margins due to lower operating margins of acquired businesses, increased headcount costs, and other expenses associated with adding and supporting new products; • Difficulties in retaining and integrating key employees; • Substantial reductions of our cash resources and / or the incurrence of debt, which may be at higher than anticipated interest rates; • Failure to realize expected synergies or cost savings; • Difficulties in integrating or expanding sales, marketing and distribution functions and administrative systems, including **IT** ~~information technology~~ and human resources systems; • Dilution of our current stockholders through the issuance of common stock as **a** part of **transaction** ~~the merger~~ consideration; • Difficulties in negotiating, governing and realizing value from strategic investments; • Assumption of unknown liabilities, including tax, litigation, cybersecurity and commercial- related risks, and the related expenses and diversion of resources; • Incurrence of costs and use of additional resources to remedy issues identified prior to or after an acquisition; • Disruption of ongoing business operations, including diversion of management' s attention and uncertainty for employees and customers, particularly during the post- acquisition integration process; • Potential negative impacts on our relationships with customers, distributors and business partners; • Exposure to new operational risks, regulations and business customs to the extent acquired businesses are located in regions where we are not currently conducting business; • The need to implement controls, processes and policies appropriate for a public company at acquired companies that may have previously lacked such controls, processes and policies in areas such as cybersecurity, **IT** ~~information technology~~ , privacy and more; • Negative impact on our net income resulting from acquisition or investment- related costs; and • Requirements imposed by government regulators in connection with their review of an acquisition, including required divestitures or restrictions on the conduct of our business or the acquired business. **Additionally, we have divested and may in the future divest certain product lines or technologies that no longer fit our long- term strategies. Divestitures may adversely impact our business, operating results and financial condition if we are unable to achieve the anticipated benefits or cost savings from such divestitures, or if we are unable to offset impacts from the loss of revenue associated with the divested product lines or technologies. For example, if we decide to sell or otherwise dispose of certain product lines or assets, we may be unable to do so on satisfactory terms within our anticipated timeframe or at all. Further, whether such divestitures are ultimately consummated or not, their pendency could have a number of negative effects on our current business, including potentially disrupting our regular operations, diverting the attention of our workforce and management team and increasing undesired workforce turnover. It could also disrupt existing business relationships, make it harder to develop new business relationships, or otherwise negatively impact the way that we operate our business.** If we do not manage the foregoing risks, the **transactions** ~~acquisitions or strategic investments~~ that we **complete or are unable to** complete may have an adverse effect on our business **, operating results** and financial condition **and the COVID- 19 pandemic** .If we fail to timely recruit and / or retain senior management and key employees globally,our business may be harmed.We depend in large part upon the services of our senior management team ~~and key employees~~ to drive our future success,and certain **team members** ~~of such personnel~~ depart our company from time to time ~~,with the frequency and number of such departures varying widely~~ . **If** ~~For example,~~ we **were** ~~have recently experienced significant changes~~ to **lose the services of any member of** our ~~executive leadership~~ **senior management** team **without adequate notice** ~~due to planned succession and other departures.The departure of key employees could result in significant disruptions to our operations~~ , ~~including~~ **our business could be** adversely **affected** ~~affecting the timeliness of our product releases,the successful implementation and completion of our initiatives,the adequacy of our internal control over financial reporting,and our business,operating results and financial condition~~ .To be successful,we must also attract ~~senior management~~ and **retain** key employees who join us organically and through acquisitions.There are a limited number of qualified engineers.Competition for these individuals and other qualified employees is intense and has increased globally,including in major markets such as Asia.Our employees are often recruited aggressively by our competitors and our customers worldwide.Any failure to recruit and ~~/ or~~ retain ~~senior management and~~ key employees could harm our business, ~~operating~~ results **of operations** and financial condition **,and our recruiting and retention efforts may be negatively impacted by the ongoing COVID- 19 pandemic** .Additionally,efforts to recruit ~~such~~ **and retain qualified** employees could be costly and negatively impact our operating expenses.We issue equity awards from employee equity plans as a key component of our overall compensation.We face pressure to **limit the use of such equity- based compensation due to its dilutive effect on stockholders.If we are unable to grant attractive equity- based packages in the future,it could limit our ability to attract and retain key employees** . We may pursue new product and technology initiatives, and if we fail to successfully carry out these initiatives, we could be adversely impacted. As part of the evolution of our business, we have made substantial investments to develop new products and enhancements to existing products through our acquisitions and research and development efforts. If we are unable to anticipate technological changes in our industry by introducing new or enhanced products in a timely and cost- effective manner, or if we fail to introduce products that meet market demand, we may lose our competitive position, our products may become obsolete, and our business, **operating results and** financial condition or results of operations could be adversely affected. Additionally, from time to time, we may invest in efforts to expand into adjacent markets, including, for example, software security ~~and~~ **,** quality testing solutions **and AI** . Although we believe these solutions are complementary to our EDA tools, we have less experience and a more limited operating history in offering software quality testing and security products and services, and our efforts in ~~this area~~ **creating AI technology solutions such as Synopsys. ai** may not be successful. Our success in these and other new markets depends on a variety of factors, including **, but not limited to,** the following: • Our ability to attract a new customer base, including in industries in which we have less experience; • Our successful development of new sales and marketing strategies to meet customer requirements; • Our ability to accurately predict, prepare for and promptly respond to technological developments in new fields, including, in the case of our software quality testing and security tools and services, identifying new security vulnerabilities in software code and ensuring support for a growing number of programming languages; • Our ability to compete with new and existing competitors in these new industries, many of which may have more financial resources, industry experience, brand recognition, relevant intellectual property rights or established customer relationships than we currently do, and could include free and open source solutions that provide similar software quality testing ~~and~~ **,** security tools **and AI solutions** without fees; • Our ability to skillfully balance our investment in adjacent markets with investment in our existing products and services; • Our ability to attract and retain employees with expertise in new fields; • Our ability to sell and support consulting services at profitable margins; and • Our ability to manage our revenue model in connection with hybrid sales of licensed products and consulting services. Difficulties in any of our new product development efforts or our efforts to enter adjacent markets, including as a result of delays or disruptions, ~~new~~ **or** export control restrictions ~~or the ongoing COVID- 19 pandemic~~ , could adversely affect our **business,** operating results and financial condition. We may have to invest more resources in research and development than anticipated, which could increase our operating expenses and negatively affect our operating results. We devote substantial resources to research and development. New competitors, technological advances in the semiconductor industry or by competitors, our acquisitions, our entry into new markets or other competitive factors may require us to invest significantly greater resources than we anticipate. If we are required to invest significantly greater resources than anticipated without a corresponding increase in revenue, our operating results could decline. If customers reduce or slow the need to upgrade or enhance their product offerings, our revenue and operating results may be adversely affected. Additionally, our periodic research and development expenses may be independent of our level of revenue, which could negatively impact our financial results. New products may not adequately address the changing needs of the marketplace. New software products may contain undetected errors, defects or vulnerabilities. The occurrence of any defects or errors in our products could result in lost or delayed market acceptance and sales of our products, delays in payment by customers, loss of customers or market share, product returns, damage to our reputation, diversion of our resources, increased service and warranty expenses or financial concessions, increased insurance costs and potential liability for damages. Finally, there can be no guarantee that our research and development investments will result in products that create additional revenue. Product errors or defects could expose us to liability and harm our reputation and we could lose market share. Software products frequently contain errors or defects, especially when first introduced, when new versions are released, or when integrated with technologies developed by acquired companies. Product errors, including those resulting from third-party suppliers, could affect the performance or interoperability of our products, could delay the development or release of new products or new versions of products and could adversely affect market acceptance or perception of our products. In addition, any allegations of manufacturability issues resulting from use of our IP products could, even if untrue, adversely affect our reputation and our customers' willingness to license IP products from us. Any such errors or delays in releasing new products or new versions of products or allegations of unsatisfactory performance could cause us to lose customers, increase our service costs, subject us to liability for damages and divert our resources from other tasks, any one of which could materially and adversely affect our business ~~and~~ **,** operating results **and financial condition** . Our hardware products, which primarily consist of prototyping and emulation systems, subject us to distinct risks. The growth in sales of our hardware products subjects us to several risks, including **, but not limited to** : • Increased dependence on a sole supplier for certain hardware components, which may reduce our control over product quality and pricing and may lead to delays in production and delivery of our hardware products, should our supplier fail to deliver sufficient quantities of acceptable components in a timely fashion; • Increasingly variable revenue and less predictable revenue forecasts, due to fluctuations in hardware revenue, which is recognized upfront upon shipment, as opposed to most sales of software products for which revenue is recognized over time; • Potential reductions in overall margins, as the gross margin for our hardware products, is typically lower than those of our software products; • Longer sales cycles, which create risks of insufficient, excess or obsolete inventory and variations in inventory valuation, which can adversely affect our **business,** operating results **and financial condition** ; • Decreases or delays in customer purchases in favor of next- generation releases **or competitive products** , which may lead to excess or obsolete inventory or require us to discount our older hardware products; • Longer warranty periods than those of our software products, which may require us to replace hardware components under warranty, thus increasing our costs; and • Potential impacts on our supply chain, including ~~due to~~ the effects of ~~increasing~~ **increased global** inflationary pressures and ~~rising global~~ interest rates, **and** a sustained global semiconductor shortage and the COVID- 19 pandemic....... ability to attract and retain key employees . From time to time, we are subject to claims that our products infringe on third- party intellectual property rights. We are from time to time subject to claims alleging our infringement of third- party intellectual property rights, including patent rights. Under our customer agreements and other license agreements, we agree in many cases to indemnify our customers if our products are alleged to infringe **on** a third party' s intellectual property rights. Infringement claims can result in costly and time- consuming litigation, require us to enter into royalty arrangements, subject us to damages or injunctions restricting our sale of products, invalidate a patent or family of patents, require us to refund license fees to our customers or to forgo future payments, or require us to redesign certain of our products, any one of which could harm our business and operating results. For example, some customers have requested we defend and indemnify them against claims for patent infringement asserted in various district courts and at the U. S. International Trade Commission by Bell Semiconductor LLC (Bell Semic), a patent monetization entity, based on Bell Semic' s allegation that the customers' use of one or more features of certain of our products infringes one or more of six patents held by Bell Semic. We **are** ~~have offered to defend~~ **defending** some of our customers consistent with the terms of our End User License Agreement **. Further information regarding Bell Semic is contained in Part I, Item 3, Legal Proceedings of this Annual Report on Form 10- K** . We may not be able to continue to obtain licenses to third- party software and intellectual property on reasonable terms or at all, which may disrupt our business and harm our financial results. We license third- party software and other intellectual property for use in product research and development and, in several instances, for inclusion in our products. We also license third- party software, including the software of our competitors, to test the interoperability of our products with other industry products and in connection with our professional services. These licenses may need to be renegotiated or renewed from time to time, or we may need to obtain new licenses in the future. Third parties may stop adequately supporting or maintaining their technology, or they or their technology may be acquired by our competitors. If we are unable to obtain licenses to these third- party software and intellectual property on reasonable terms or at all, we may not be able to sell the affected products, our customers' use of the products may be interrupted, or our product development processes and professional services offerings may be disrupted, which could in turn harm our financial results, our customers, and our reputation. The inclusion of third- party intellectual property in our products can also subject us and our customers to infringement claims. **We** ~~Although we seek to mitigate this risk contractually, we~~ may not be able to sufficiently limit our potential liability **contractually** . Regardless of outcome, infringement claims may require us to use significant resources and may divert management' s attention from the operation of our business. Some of our products and technology, including those we acquire, may include software licensed under open source licenses. Some open source licenses could require us, under certain circumstances, to make available or grant licenses to any modifications or derivative works we create based on the open source software. **The** ~~Although we have tools and processes to monitor and restrict our use of open source software, the~~ risks associated with open source usage may not be eliminated **despite our best efforts** and may, if not properly addressed, result in unanticipated obligations that harm our business. In preparing our financial statements we make certain assumptions, judgments and estimates that affect amounts reported in our consolidated financial statements, which, if not accurate, may significantly impact our financial results. We make assumptions, judgments and estimates for a number of items, including the fair value of financial instruments, goodwill, long- lived assets and other intangible assets, the realizability of deferred tax assets, the recognition of revenue and the fair value of stock awards. We also make assumptions, judgments and estimates in determining the accruals for employee- related liabilities, including commissions and variable compensation, and in determining the accruals for uncertain tax positions, valuation allowances on deferred tax assets, allowances for credit losses, and legal contingencies. These assumptions, judgments and estimates are drawn from historical experience and various other factors that we believe are reasonable under the circumstances as of the date of the consolidated financial statements. Actual results could differ materially from our estimates, and such differences could significantly impact our financial results. Liquidity requirements in our U. S. operations may require us to raise cash in uncertain capital markets, which could negatively affect our financial condition. As of October 31, ~~2022~~ **2023**, approximately ~~48~~ **52** % of our worldwide cash and cash equivalents balance is held by our international subsidiaries. We intend to meet our U. S. cash spending needs primarily through our existing U. S. cash balances, ongoing U. S. cash flows, and available credit under our term loan and revolving credit facilities. Should our cash spending needs in the U. S. rise and exceed these liquidity sources, we may be required to incur additional debt at higher than anticipated interest rates or access other funding sources, which could negatively affect our **operating** results ~~of operations~~, capital structure or the market price of our common stock. Legal and Regulatory Risks Our results could be adversely affected by a change in our effective tax rate ~~as a result of tax law changes and related new or revised guidance and regulations~~, changes in our geographical earnings mix, unfavorable government reviews of our tax returns, material differences between our forecasted and actual annual effective tax rates, **or** future changes to our tax structure ~~, or by evolving enforcement practices~~. Our operations are subject to income and transaction taxes in the ~~United States~~ **U. S.** and in multiple foreign jurisdictions. Because we have a wide range of statutory tax rates in the multiple jurisdictions in which we operate, any changes in our geographical earnings mix, including those resulting from our intercompany transfer pricing or from changes in the rules governing transfer pricing, could materially impact our effective tax rate. Furthermore, a change in the tax law of the jurisdictions where we do business, including an increase in tax rates, an adverse change in the treatment of an item of income or expense, or limitations on our ability to utilize tax credits, could result in a material increase in our tax expense and impact our financial position and cash flows. ~~For example, in response to the fiscal impact of the COVID- 19 pandemic, the State of California enacted legislation on June 29, 2020 that suspends the use of certain corporate research and development tax credits for a three- year period beginning in our fiscal 2021, which resulted in an impact to our tax expense. On February 9, 2022, California Governor Newsom signed into law 2022 CA SB 113, which shortened the previously enacted suspension on the use of research and development tax credits to a two- year period covering our fiscal 2021 and 2022.~~ On December 22, 2017, the Tax Cuts and Jobs Act ( **the** Tax Act) was enacted, which significantly changed prior U. S. tax law and includes numerous provisions that affect our business. The Tax Act includes certain provisions that began to affect our income in the first quarter of fiscal 2019, while other sections of the Tax Act and related regulations ~~will begin~~ **began** to affect our business in the first quarter of fiscal 2023. **One of these** ~~There are various proposals in Congress to amend certain~~ provisions **includes the requirement to capitalize and amortize research and development expenditures instead** of **expensing such expenditures as incurred. This results in a significant increase to our cash tax liability and also decreases our effective tax rate due to increasing the foreign derived intangible income deduction. On September 8, 2023, the Internal Revenue Service issued initial guidance for** the Tax Act **in Notice 2023- 63** ~~. The state of these proposals~~ and ~~other~~ **indicated regulatory guidance will follow.** ~~future~~ **Future** ~~legislation~~ **regulatory guidance** remains uncertain and ~~, if enacted,~~ may materially affect our financial position. On August 16, 2022, the Inflation Reduction Act of 2022 ( **the** IR Act) was enacted in the ~~United States~~ **U. S**. The IR Act includes a **15 %** minimum tax rate ~~of 15 %~~, as well as tax credit incentives for reductions in greenhouse gas emissions. The details of the computation of the tax and implementation of the incentives will be subject to regulations to be issued by the U. S. Department of the Treasury. On August 9, 2022, the CHIPS and Science Act of 2022 (CHIPS Act) was enacted in the ~~United States~~ **U. S.** to provide certain financial incentives to the semiconductor industry, primarily for manufacturing activities within the ~~United States~~ **U. S**. We are continuing to monitor the IR Act and CHIPS Act and related regulatory developments to evaluate their potential impact on our business and operating results. On October 8, 2021, the Organization for Economic Co- operation and Development (OECD) announced the OECD / G20 Inclusive Framework on Base Erosion and Profit Shifting (Framework) which agreed to a two- pillar solution to address tax challenges arising from digitalization of the economy. On December 20, 2021, the OECD released Pillar Two Model Rules **(Pillar Two)** defining the global minimum tax rules, which contemplate a **15 %** minimum tax rate ~~of 15 %~~. The OECD continues to release additional guidance **, including Administrative Guidance** on **how** ~~these~~ -- **the Pillar Two** rules **should be interpreted** and ~~the~~ **applied and many countries are passing legislation to comply with Pillar Two. The** Framework calls for law enactment by OECD and G20 members to take effect in ~~2023 and~~ 2024 **and 2025**. These changes, when enacted by various countries in which we do business, may increase our taxes in these countries. Changes to these and other areas in relation to international tax reform, including future actions taken by foreign governments in response to the Tax Act, could increase uncertainty and may adversely affect our tax rate and cash flow in future years. Our income and non- income tax filings are subject to review or audit by the Internal Revenue Service and state, local and foreign taxing authorities. We exercise significant judgment in determining our worldwide provision for income taxes and, in the ordinary course of our business, there may be transactions and calculations where the ultimate tax determination is uncertain. We may also be liable for potential tax liabilities of businesses we acquire ~~, including future taxes payable related to the transition tax on~~

~~earnings from their foreign operations, if any, under the Tax Act~~ . **The** ~~Although we believe our tax estimates are reasonable, the~~ final determination in an audit may be materially different than the treatment reflected in our historical income tax provisions and accruals. An assessment of additional taxes because of an audit could adversely affect our income tax provision and net income in the periods for which that determination is made. For further discussion on our ongoing ~~audit~~ **audits** , see Note 15 **. Income Taxes** of the Notes to Consolidated Financial Statements **in this Annual Report** under the heading ~~“~~ **"** Non- U. S. Examinations. ~~”~~ **"** We maintain significant deferred tax assets related to certain tax credits **and capitalized research and development expenditures** . Our ability to use these ~~credits~~ **deferred tax assets** is dependent upon having sufficient future taxable income in the relevant jurisdiction and in the case of foreign tax credits, how such credits are treated under current and potential future tax law. Changes to **tax laws and** ~~the Tax Act, other regulatory~~ **regulations** ~~changes~~ , and changes in our forecasts of future income could result in an adjustment to the deferred tax asset and a related charge to earnings that could materially affect our financial results. Our business is subject to evolving corporate governance and public disclosure regulations and expectations, including with respect to environmental, social and governance matters **,** that could expose us to numerous risks. We are subject to changing rules and regulations promulgated by a number of governmental and self- regulatory organizations, including **, among others,** the SEC, the Nasdaq Stock Market and the Financial Accounting Standards Board (FASB). These rules and regulations continue to evolve in scope and complexity and many new requirements have been created in response to laws enacted by Congress, making compliance difficult and uncertain. In addition, ~~increasingly~~ regulators, customers, investors, employees and other stakeholders are ~~focusing~~ **increasingly focused** on environmental, social and governance (ESG) matters and related disclosures. These changing rules, regulations and stakeholder expectations have resulted in, and are likely to continue to result in, increased general and administrative expenses and increased management time and attention spent complying with or meeting such regulations and expectations. For example, developing and acting on ESG initiatives, and collecting, measuring, and reporting ESG information and metrics can be costly, difficult and time consuming and is subject to evolving reporting standards, including the SEC’ s proposed climate- related reporting requirements. We may also communicate certain initiatives and goals regarding environmental matters, diversity, responsible sourcing, social investments and other ESG matters in our SEC filings or in other public disclosures. These initiatives and goals could be difficult and expensive to implement, the technologies needed to implement them may not be cost effective and may not advance at a sufficient pace, and ensuring the accuracy, adequacy, or completeness of the disclosure of our ESG initiatives can be costly, difficult and time ~~-~~ consuming. Further, statements about our ESG initiatives and goals, and progress against those goals, may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change. **We** ~~In addition, we~~ could **also** face scrutiny from certain stakeholders for the scope or nature of such initiatives or goals, or for any revisions to these goals. If our ESG- related data, processes and reporting are incomplete or inaccurate, or if we fail to achieve progress with respect to our ESG goals on a timely basis, or at all, our business, financial performance and growth could be adversely affected. Changes in the U. S. generally accepted accounting principles (U. S. GAAP) could adversely affect our financial results and may require significant changes to our internal accounting systems and processes. We prepare our consolidated financial statements in conformity with U. S. GAAP. These principles are subject to interpretation by the FASB, the SEC and various bodies formed to interpret and create appropriate accounting principles and guidance. The FASB periodically issues new accounting standards on a variety of topics, including, for example, revenue recognition and accounting for leases. These and other such standards generally result in different accounting principles, which may significantly impact our reported results or could result in variability of our financial results. We may be subject to litigation proceedings that could harm our business. We may be subject to legal claims or regulatory matters involving stockholder, consumer, employment, customer, supplier, competition and other issues on a global basis. Litigation is subject to inherent uncertainties, and unfavorable rulings could occur. An unfavorable ruling could include monetary damages or, in cases for which injunctive relief is sought, an injunction prohibiting us from manufacturing or selling one or more products. If we were to receive an unfavorable ruling on a matter, our business and **operating** results ~~of operations~~ could be materially harmed. Further information regarding certain of these matters is contained in Part I, Item 3, Legal Proceedings **of this Annual Report on Form 10- K** . There are inherent limitations on the effectiveness of our controls and compliance programs. Regardless of how well designed and operated it is, a control system can provide only reasonable assurance that its objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. **Our** ~~Moreover, although we have implemented~~ compliance programs and compliance training for employees ~~, such measures~~ may not prevent our employees, contractors or agents from breaching or circumventing our policies or violating applicable laws and regulations. Failure of our control systems and compliance programs to prevent error, fraud or violations of law could have a material adverse impact on our business. General Risks Our investment portfolio may be impaired by any deterioration of capital markets. From time to time, our cash equivalent and short- term investment portfolio consists of investment- grade U. S. government agency securities, asset- backed securities, corporate debt securities, commercial paper, certificates of deposit, money market funds, municipal securities and other securities and bank deposits. Our investment portfolio carries both interest rate risk and credit risk and may be negatively impacted by deteriorating economic conditions ~~and rising~~ **, increased** global **inflationary pressures and** interest rates **and bank failures** . Fixed rate debt securities may have their market value adversely impacted due to a credit downgrade or a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall or a credit downgrade occurs. Our future investment income may fall short of expectations due to changes in interest rates or if the decline in fair value of investments held by us is judged to be other- than- temporary. In addition, we may suffer losses in principal if we are forced to sell securities that decline in market value due to changes in the issuer’ s credit quality or changes in interest rates. Catastrophic events and the effects of climate change **,**

**pandemics or other unexpected events** may disrupt our business and harm our operating results. Due to the global nature of our business, our operating results may be negatively impacted by catastrophic events and the effects of climate change **, pandemics, such as the recent COVID- 19 pandemic, or other unexpected events** throughout the world. We rely on a global network of infrastructure applications, enterprise applications and technology systems for our development, marketing, operational, support and sales activities. A disruption or failure of these systems in the event of a major earthquake, fire, extreme temperatures, drought, flood, telecommunications failure, cybersecurity attack, terrorist attack, epidemic or pandemic ~~(including the ongoing COVID- 19 pandemic)~~ , or other catastrophic events or climate change- related events could cause system interruptions, delays in our product development and loss of critical data and could prevent us from fulfilling our customers' orders. In particular, our sales and infrastructure are vulnerable to regional or worldwide health conditions, including the effects of the outbreak of contagious diseases **,** such as **the government- imposed restrictions that curtailed global economic activity and caused substantial volatility in global financial markets during** the COVID- 19 pandemic. Moreover, our corporate headquarters, a significant portion of our research and development activities, our data centers, and certain other critical business operations are located in California, near major earthquake faults and sites of recent wildfires, which may become more frequent, along with other extreme weather events, due to climate change. A catastrophic event or other extreme weather event that results in the destruction or disruption of our data centers or our critical business or **IT** ~~information technology~~ systems would severely affect our ability to conduct normal business operations and, as a result, our operating results would be adversely affected.