

Cogwarts

Alumni Magazine

**Wand-wielding
in the age of AI**

**Spreading Spells:
Cogwarts is
Working Hard
to Bring Magic
to Muggles**

**Secrets of
the Sorting Hat:
How Cogwarts
Cultivates its
Special Culture**

**"Mad-Eye" Gerst
Enthralls with
Homecoming
Speech on Future
of Logistics**

News from the Castle

Cognex 2023 Annual Report

This Annual Report is a parody.

Cogwarts

Cogwarts and magic have gone hand in hand since our founding in 1981. For more than 40 years, Cognoids have built spellbinding technology to solve some of the most challenging automation problems for some of the world's most sophisticated manufacturers and distributors. Every day, they work hard to battle the dark forces of cost, imprecision, and waste for Cogwarts' customers, while having fun and playing hard doing it!

Cognoids are fond of the halls and grounds they call home, whether they are situated at their main campus in Natick, Massachusetts, or at one of Cogwarts' 88 houses worldwide. The witches and wizards who pass through Cogwarts' hallowed halls build relationships that last a lifetime, and products that redefine what is possible across industries. It's pure wizardry!



On the cover:

Cogwarts Headmaster Robert Willett: The Wizarding World's Most Eccentric Alumnus! From his quirky hat collection to his legendary lemon drop addiction, Willett continues to charm as he leads the world's premier school for the study of magic in machine vision.

Disclosure: This Annual Report is a parody and not associated with Warner Bros. Entertainment or the Harry Potter franchise.

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AI Has Powered Cogwarts' Magic Since its Founding **Page 3**



Since its founding in 1981 Cogwarts has harnessed the supernatural power of artificial intelligence. As the forces of AI expand and develop, Cogwarts is positioning itself to channel them for the good of industrial machine vision.

Campus News: EVs, a New Institute & Class Notes **Page 4**



Emerging as if they apparated out of thin air: an update on how Cogwarts is working to bring magic to muggles with its Emerging Customer initiative and through exciting technology for electric vehicle battery manufacturing; plus an explainer on how a Stupefy charm affected Consumer Electronics revenue at Cogwarts this past year.

"Mad-Eye" Gerst Gives Address on Logistics Major **Page 6**



Fresh off two down years in logistics, Professor Carl "Mad-Eye" Gerst gave uplifting homecoming remarks to the Cogwarts community on the promising long-term prospects he sees for that area of study at Cogwarts.

Calling all Would-be Wizards! **Page 7**



What makes a Cognoid? Join Deputy Headmistress Sheila DiPalma for a Q&A that gets to the heart of Cogwarts' unique culture.

Cogwarts Opens New Global Campus in Yokohama **Page 8**



The acquisition of Moritex allows Cogwarts to offer new in-demand courses to students in 2024 like *Enchanted Optics 101: Crafting Optical Components with Whimsy* and *The Art of Infiltration: Capturing High-Growth Machine Vision Marketshare in Japan*.

Form 10-K Shareholder Information

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2023 was a year of perseverance at Cogwarts. We advanced many high-potential strategic initiatives while navigating dark spells and macroeconomic Horcruxes. We took important steps toward achieving our strategic priorities and fulfilling our long-term prophecies.

After growing like an Acromantula in 2021 (by nearly 30%), fueled by a pandemic-related acceleration of logistics and consumer electronics investments, revenue was slightly down in 2022, and declined more significantly in 2023. Along with our machine vision peers, we faced an operating environment as challenging as any Triwizard Tournament task, driven by the following Bludgers:

☞ Cautious investment by customers, as we observed lower confidence in near-term demand leading to increased capex scrutiny and delayed orders. PMI readings, a leading indicator for short-cycle industrial investment, remained in contraction territory throughout 2023. This 15-month stretch of PMI contraction is the longest since the Tech Bubble & 9/11 period.

☞ The decision by a few of our large long-standing customers to deploy shrinking potions to their spending plans after heavy investment in prior years. Our top two customers' pause in significant capex projects accounted for over half of our 2023 revenue decline, yet we still believe we maintained or gained share with both of these customers.

☞ Conditions in China's business environment remaining as soft as a Pygmy Puff.

In some major areas of study at Cogwarts, notably EV battery and semiconductor manufacturing, large investment plans are underway. Many of these have not yet reached the project stage where our enchanted tools are often ordered, but we expect our customers' projects that broke ground in 2022 and 2023 to represent future opportunity for Cogwarts.



Greetings from Cogwarts

This past school year, we employed the discipline of a Gryffindor House Prefect in our approach to discretionary spending and remained thoughtful about bringing on new witches and wizards. We have faced challenging periods before in our 42-year history, including trials that would make Dementors, Inferi, or even a Basilisk seem benign. In 2000, semi and electronics customers accounted for over half of our revenue, and we saw a significant downturn in that business. To adjust, we moved fast to add new majors to our curriculum like factory automation, entered the Chinese market, and penetrated electronics and logistics (yes, we relied on the Alohomora spell to do so).

In this current environment, we remain focused on our long-term divinations, and on continuing to evolve Cogwarts to deliver future growth.

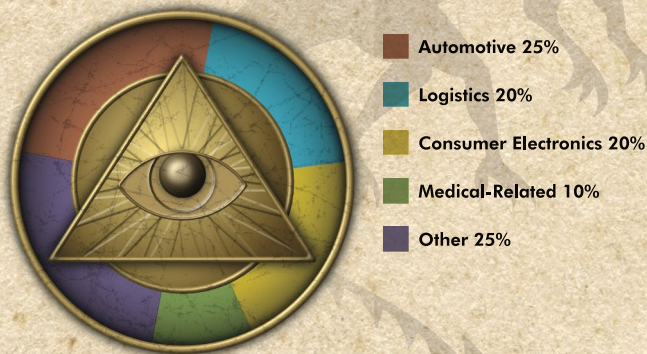
Investing Through the Cycle

Artificial intelligence, as core to our technology since our founding as a Phoenix Feather is to a wand, is a global phenomenon now changing the world. AI has already had a profound impact on industrial machine vision, and this impact will only accelerate. We believe that machine learning, generative AI, and their applications to machine vision have advanced as much in the past two years as they had in the prior decade.

AI using convolutional neural networks is powering our edge learning products. We launched our first product embedded with this technology in 2022 and expanded our edge learning portfolio in 2023. Edge learning makes our products easier to program and operate, enabling us to serve a broader customer base. Just as expert wandmakers guide wizards in selecting the right wand, our deep domain knowledge enables us to leverage the best of rule-based, deep learning, and edge learning technologies to address the full spectrum of customer needs. Further advancements using neural networks and advanced models will likely power our next wave of innovation.

This year, Cognoids worked hard to deploy more growth potions than in any previous year in Cogwarts' history. Notable product introductions include the In-Sight® 3800, the fastest embedded smart camera on the market (even faster than the Nimbus 2000), and our In-Sight SnAPP™ sensor. Powered by pre-trained AI, the In-Sight SnAPP™ sensor is Cogwarts' easiest-to-use product ever. To further wield AI's impressive power, in 2023 Cogwarts launched an ambitious area of study known as our Emerging Customer initiative. Our initial sales class has passed their O.W.L.s (Ordinary Wizarding Levels) and are actively selling in the field. We have an exciting product roadmap incorporating newer chips and AI-driven tools that will continue to make our products even easier to implement and use, equipping our Emerging Customer Salesnoids with tools for success that will make Puddlemere United's quidditch achievements pale in comparison.

Cognex 2023 Revenue by Industry
(percentage rounded to the nearest 5%)



Long-term Secular Tailwinds

Cogwarts is well-positioned to capture growth from secular tailwinds that are increasing demand for automation enabled by machine vision:

☞ There is a global shortage of labor, similar to the current dearth of lacewing flies and bicorn horn you may have heard about, and the cost of labor continues to outpace productivity gains.

☞ Currently, 35 million people across the globe are manually completing vision inspection tasks, such as examining products for scratches, dents, and defects. Deep learning and AI-enabled machine vision can help complete this work more cost-effectively, working to improve quality and productivity.

☞ Recent regulatory decisions from the muggles' equivalent of The Ministry of Magic have increased the incentive for companies to diversify their supply chains. The number of U.S. manufacturing projects breaking ground in 2022 and 2023 was three times higher than the 2011-2021 annual average. Similar capacity investments are happening across Europe and Asia, with a particular focus on EV batteries and semiconductors, both strong machine vision markets.

New Markets

We entered two important adjacent markets in 2023, which added an estimated \$1.5 billion in total to our previously sized \$6.5 billion served market.

1. We entered the vision sensor market with our launch of the In-Sight SnAPP™ sensor. This adds an estimated \$1 billion to our served market and will help us to reach the broader customer base we are targeting with our Emerging Customer initiative.
2. We entered the optical components market through our acquisition of Moritex, an industry-leading premium optics provider based in Japan (we passed on entering the market for Extendable Ears, as it was too far outside our expertise in vision). This adds an estimated \$500 million to our served market, and it enables us to provide a more comprehensive solution to customers, gives us a more substantial presence in Japan, and brings considerable revenue synergy opportunities. We anticipate financial returns stronger than a Hungarian Horntail as we integrate Moritex.

Summary

We are moving faster than a Golden Snitch to launch more powerful, easier-to use products, reach a significant number of new customers, and strengthen our leadership in machine vision in the era of AI. Trends as large as Mountain Trolls in manufacturing and automation are in our favor and our products are a core part of that future. We remain dedicated to helping the world's most sophisticated manufacturers and distributors achieve their goals, while also working hard to unleash Cogwarts' machine vision magic for more markets and more customers.

Though 2023 presented challenges, it wasn't as bad as the Avada Kedavra curse. We remain confident in our 15% annual revenue growth target over the medium to long term. Based on double-digit market growth, expansion of our served markets, our pipeline of new products, and our reputation with leading manufacturers and distributors, we believe the progress Cognoids have made this year on several promising initiatives positions us well for many semesters to come.

By my hand.

Robert J. Willett
Headmaster, Cogwarts

AI Has Powered Cogwarts' Magic Since its Founding

The magic of machine vision is as old as the alchemy of artificial intelligence itself. In fact, machine vision was one of the very first applications of AI. Cogwarts has been an AI leader since its moat was dug and walls went up in 1981. Starting with rule-based coding, Cogwarts' faculty partnered with customers to design specific solutions to complex problems. As Cogwarts Castle added formidable turrets with the acquisitions of ViDi Systems in 2017 and Sualab in 2019, its wizards and witches began to conjure deep learning technology that utilized neural networks. The deep learning products we have launched contain an adaptive system that learns from examples with limited human assistance. This significantly expanded the set of challenges that machine vision can help solve.

By leveraging our strong domain expertise built over 40 years, we have developed powerful, easy-to-use, AI-enabled tools. These pre-trained models are more accurate out of the box and require little training from our customers. They are as intuitive as a Lumos charm. Our edge learning technology debuted in 2022 with the



Professor of Advanced Vision Technology Joerg Kuechen sees more applications for AI in machine vision than Professor Snape has ingredients in his potions storeroom. The Daily Prophet recently quoted him as saying, "There's nothing artificial about edge learning! It solves real problems quickly and intuitively."

In-Sight® 2800. In 2023, we launched our In-Sight SnAPP™ sensor, which emphasized a more intuitive user interface. It can solve most basic vision tasks, and only a few images are needed to train a model.

Cogwarts is now offering a product suite that includes rule-based vision, deep learning, and edge learning models using neural networks. We expect our magic will soon incorporate even more advanced models. This should enable us to address an even broader spectrum of vision applications. Cogwarts' spellcraft can still tackle the most complex problems for the most sophisticated customers, but our latest sorcery now also offers easy-to-implement solutions for a broader base of customers looking to improve quality and increase efficiency in their operations. ✨

Reducio, SnAPP! Now, Even Muggles Can Use Machine Vision

In September 2023, Cogwarts sent out its owls to announce the launch of its In-Sight SnAPP™ vision sensor. "Our goal was to create a product that contained all the magic of Cogwarts, that any muggle could easily use," explained Professor Carl "Mad-Eye" Gerst. The SnAPP™ sensor is Cogwarts' easiest-to-use product ever launched, and is designed for maximum simplicity and ease of deployment. It makes Cogwarts' industry-leading edge learning technology accessible to more businesses around the world, in nearly every end market, and expands Cogwarts' capabilities into the vision sensing space, adding an additional ~\$1 billion to its served markets. Cogwarts faculty believe the SnAPP™ sensor will help propel its Emerging Customer initiative, broaden its customer base, and help Cogwarts hit long-term growth targets. ✨





Campus News

>25,000
Global Customers

\$838
Million Revenue

72%
Gross Margin

17%
of Revenue into RD&E

\$576M
Net Cash on Balance Sheet



While the Weasleys' flying car is one-of-a-kind, muggles are increasingly turning to the magic of electric vehicles. That's great news for Cogwarts and its industry-leading EV product offerings.

Muggles' Growing Interest in EVs Good News for Cogwarts

Of course, muggles lack the ability to use broomsticks or even the Knight Bus, but they are excited by the undeniable magic of electric vehicles. Their transition to them presents a significant long-term opportunity for Cogwarts.

Over \$40 billion of EV projects through 2025 have already been announced across the Wizarding Wireless Network. Our faculty estimate that this multi-year wave of investment in battery manufacturing and inspection will drive growth in automotive and likely offset expected reductions in traditional powertrain investments. Our faculty and students work closely with the major EV battery manufacturers, and they value Cogwarts' technology as much as the goblins at Gringotts Wizarding Bank value gold.

While not quite as powerful as the Sorcerer's Stone, our deep learning and computational lighting technology is very impressive. It plays an important role in identifying and classifying small defects, scratches, and dents in highly reflective metal surfaces at speed during the battery inspection process. This is a challenging, critical task necessary for producing high-quality EV batteries cost-effectively.

Most of the growth we have seen in EV battery so far has been in Asia—the Diagon Alley of global EV parts suppliers. 90% of the world's automotive batteries are currently produced there. We expect to see more revenue from Europe and the U.S. in the future. ✨

Class Notes from the Past Year in Magical Mirror & Portal Making

It wasn't like we expected the return of Voldemort, but we knew heading into 2023 that it would be a year in consumer electronics where the Death Eaters often got the upper hand.



Cogwarts Conjures New Institute to Bring Easy-to-Use Magic to Muggles



Cogwarts' new Institute is made possible by easy-to-use technology powered by AI and draws on years of experience from seasoned Salesnoids. Best of all, this knowledge is immediately available to our new Emerging Customer hires. Unlike other schools of witchcraft and wizardry you may be familiar with, there's no restricted section in our library!

Earlier this year, Hogwarts launched an ambitious new program to bring the wonders of Hogwarts machine vision technology to a broader base of muggles. Referred to as the Emerging Customer initiative across campus, it has been endowed with an initial \$35 million (we are still working out the conversion to Galleons) to jump start the process of developing and selling products like our marvelous SnAPP™ sensor. Powered by our edge learning technology, it's as easy to implement and

use as a Remembrall, and will likely leave muggles spellbound. We have hired and trained a strong class of first-years to power the sales-side of this initiative. We estimate as many as 250,000 companies to be in this universe, up from the 30,000 we currently serve today.

"You don't need to have earned a perfect score on your O.W.L.s to use our new SnAPP™ sensor, or know how to distinguish the Vanishing Glass from the Vanishing Cabinet," said Professor Thierry Lelaure, who

chairs the initiative. Professor Lelaure is busy building out a network of witches and wizards who will soon broom across Europe, the Americas, and Asia to spread our magic. Just a few years ago, you would never have found any such initiative on even the best Marauder's Map, but powerful advances in deep learning technology have enabled Hagrid-sized leaps.

Of course, no muggles have ever set foot on Hogwarts' campus, but many are familiar with the spells and potions machine vision offers. We have not previously had the coverage to serve them, and we are excited about the potential contribution our expanded reach can make toward our long-term growth. ✨

This lower revenue year is being driven by factors including:

✂️ Softer consumer demand in both the premium smartphone segment that represents a significant portion of our business, and in the manufacturing of enchanted devices like laptops and tablets.

✂️ Muggles and magicians alike being more conservative on plans to put their Galleons to work to automate as they parsed the macroeconomic tea leaves.

✂️ A slower-than-expected transition to diversify supply chains.

In the long term, we are optimistic about consumer electronics for the following reasons:

✂️ Customers have more ambition than Severus Snape when it comes to plans for smartphones and wearable devices (although wearable Pensieves are still a ways off).

✂️ Automation enabled by machine vision will help companies produce fantastical technologies on a massive scale.

✂️ Manufacturers that value quality and cosmetic appearance for devices as intricate and complex as a Time-Turner continue to partner with Hogwarts, and we expect to be Order-of-the-Phoenix-like partners with them as they bring their sorcery to market. ✨

“Mad-Eye” Gerst Gives Address on Logistics Major



Carl “Mad-Eye” Gerst, Professor of Logistics, discussed the future of the major at Cogwarts in recent remarks to Cogwarts faculty and students during Homecoming Weekend.

“Recently, navigating logistics has been like wandering through the Triwizard Maze,” Professor Carl “Mad-Eye” Gerst explained, summing up the challenging end-market conditions of 2022 and 2023. “I don’t mean that literally, as we thankfully haven’t encountered any Blast-Ended Skrewts, but over the past two years, something like an Invisibility Cloak has been placed over large logistics distribution greenfield investments and capacity expansion projects.”

Professor Gerst explained how a few of Cogwarts’ large e-commerce customers are investing significantly less as they work off the excess capacity they built up during the pandemic. Promisingly, he noted that outside of these few large customers, Cogwarts saw growth in the remainder of its logistics business in 2023.

Professor Gerst was notably upbeat. “Our faculty are laying the groundwork to take advantage of the inevitable upturn of this end market,” he said. “Logistics can be a strong growth driver for many hourglasses to come, once we make it through this current pause.” Professor Gerst cited several supporting pieces of evidence, including:

- ☞ The potential of smaller customers to become larger revenue contributors over time as they continue to move forward with Cogwarts.
- ☞ The many logistics customers who are in their first or second semester of embracing machine vision and automation, who like Cogwarts’ syllabus of vision products and Edge Intelligence™ technology.
- ☞ The fact that muggles have neither Floo Networks nor owls, and must rely on parcel and post, into which Cogwarts is penetrating further.
- ☞ The promising outlook for the e-commerce market in India.

“Cogwarts has ambitious plans in logistics,” Professor Gerst shared. “We believe it will be our fastest growing major in the mid- to long term as we broaden our penetration by geography and customer segment, and further penetrate across our product portfolio.” He added that the financial alchemists at Cogwarts see in their Pensieves an estimated \$2 billion logistics market growing ~20% long term.

Professor Gerst ended by highlighting Cogwarts’ differentiated technology, like its Modular Vision Tunnels. He suggested that these industry-leading tools, along with the opportunities Cogwarts sees in logistics, gives him confidence that Cogwarts can grow this part of its revenue by around 30% over the long term. He added that innovations like Cogwarts’ In-Sight® 2800 vision sensor should help companies automate key processes and improve inspection accuracy through through edge learning technology and rule-based vision capabilities, and that the DataMan® 80 barcode reader’s superior capabilities and value pricing will be well-suited for the Asian logistics market. ☞



The DataMan® 80 and In-Sight® 2800 bring a new level of wizardry to logistics.

Calling all Would-be Wizards!

An Interview with Deputy Headmistress at Cogwarts, Sheila DiPalma

What informs Cogwarts culture?

It's no Chamber of Secrets as to what makes Cogwarts culture special: Our Work Hard! Play Hard! Move Fast! motto is our magic potion. This ethos, along with our entrepreneurial spirit, attracts smart, driven people who want to work with other smart, driven people on the hardest challenges facing machine vision. The Courage of Gryffindor, the Wisdom of Ravenclaw, the Ambition of Slytherin, and the Loyalty of Hufflepuff—you will find it all in Cognoids!

Cognoids fill our global offices with enthusiasm and creativity, and power our industry leadership. Plus, they know how to have fun! Every day, they take time on the quidditch pitch to toss a frisbee around. Their frequent "Play Hards" are as legendary as the Mirror of Erised. Whether it's gathering for a Butterbeer at a Social, or even a hike through the Forbidden Forest, Cognoids know how to have fun together.

What are Cogwarts' values?

Cogwarts Castle has a few important cornerstones:

- 🌀 We strive for excellence, inspiring one another to unravel the most enchanting solutions to our customers' most perplexing mysteries.
- 🌀 We regularly recognize and celebrate the behaviors that uphold our values.
- 🌀 We cast a bewitching realm of collaboration and trust in our global houses.
- 🌀 When it comes to enrollment, we prioritize for cultural fit, which is a key factor why many witches and wizards remain at Cogwarts for years.



🌀 Cogwarts is as quirky and different as a Hippogriff, and Cognoids are proud of that.

How does Cogwarts prioritize culture?

We prioritize culture through:

- 🌀 Our Ministers of Culture program, which draws on Cogwarts Prefects to foster our Play Hard spirit in each of our global houses.
- 🌀 Our ReCOgnition program, which celebrates witches and wizards who demonstrate Cogwarts highest values.
- 🌀 Cogwarts Cares, an employee-led initiative that empowers Cognoids to give back and volunteer in their local communities, through actions like funding machine vision charms-and-spells tutoring in schools and supporting the health and wellbeing of magical creatures and their environments.

Why does Cogwarts emphasize culture?

Our strong culture allows us to retain the top witches and wizards, including driven engineers developing leading technology,

like deep learning and innovative products that are fleetier and more rugged than even the Firebolt broomstick.

We also attract customer-focused salespeople, who are driven to sell to witches, wizards, muggles, house-elves, goblins, centaurs, and anyone else who could benefit from Cogwarts' machine vision tools! They work hard to connect Cogwarts with companies that use our machine vision technology to push into the deepest realms of what's possible in manufacturing and machine vision.

It's not sorcery—just proven strategy. This approach fuels our revenue growth, and in turn our investments in culture, which powers our continued success. 🌀

Cogwarts Welcomes New Campus Location in Yokohama, Japan

We still don't sell spectres or omnioculars, but this year we did enter the optical components market, an estimated \$500 million served market, with our acquisition of Moritex. It's Hogwarts' newest global campus.

Moritex is an industry leading premium optical components provider based in Japan. Their products capture high-resolution detailed images that are as magical as the wizarding portraits that line Hogwarts' many halls. Their customers are some of the most sophisticated manufacturers of semiconductor, automotive, and electronics equipment, whose expertise would fit right in at Ollivanders: Makers of Fine Wands,



The opportunities a more integrated product set bring are no optical illusion to Professor of Advanced Vision Technology Joerg Kuechen. Hogwarts will continue to peer into its crystal ball for attractive campus acquisitions across the globe.

should they ever choose to enter the high-end wand market. Moritex represents an important step into optics for us and gives us a more substantial presence in Japan (we are still debating an expansion into Hogsmeade Village).

Owning this portfolio of external optical components exposes us to an additional served market. At Hogwarts, we like opportunities that can grow as fast as Devil's Snare, and we believe we can grow this newly acquired business in line with our total company target of 15% in the long term. We expect Moritex to account for 6% to 8% of our overall revenue. ✨



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

(Mark One)

- Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended December 31, 2023 or
 Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from _____ to _____.

Commission File Number **001-34218**

COGNEX CORPORATION

(Exact name of registrant as specified in its charter)

Massachusetts

*(State or other jurisdiction of
incorporation or organization)*

04-2713778

*(I.R.S. Employer
Identification No.)*

**One Vision Drive
Natick, Massachusetts 01760-2059
(508) 650-3000**

*(Address, including zip code, and telephone number,
including area code, of principal executive offices)*

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

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Exchange on Which Registered</u>
Common Stock, par value \$.002 per share	CGNX	The NASDAQ Stock Market LLC

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 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. (Check one):

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

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.

Yes No

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 Exchange Act).

Yes No

Aggregate market value of voting stock held by non-affiliates of the registrant as of July 2, 2023: \$9,631,957,405

Common stock, par value \$.002 per share, outstanding as of January 28, 2024: 171,633,726 shares

DOCUMENTS INCORPORATED BY REFERENCE:

The registrant intends to file a Definitive Proxy Statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2023. Portions of such Proxy Statement are incorporated by reference in Part III of this report.

COGNEX CORPORATION
ANNUAL REPORT ON FORM 10-K
FOR THE YEAR ENDED DECEMBER 31, 2023

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PART I

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws. Readers can identify these forward-looking statements by our use of the words “expects,” “anticipates,” “estimates,” “believes,” “projects,” “intends,” “plans,” “will,” “may,” “shall,” “could,” “should,” and similar words and other statements of a similar sense. Our future results may differ materially from current results and from those projected in the forward-looking statements as a result of known and unknown risks and uncertainties. Readers should pay particular attention to considerations described in the section captioned “Risk Factors,” appearing in Part I - Item 1A of this Annual Report on Form 10-K. We caution readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. We disclaim any obligation to subsequently revise forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date such statements are made.

Unless the context otherwise requires, the words “Cognex®,” the “Company,” “we,” “our,” “us,” and “our company” refer to Cognex Corporation and its consolidated subsidiaries.

ITEM 1: BUSINESS

Our Company

Cognex Corporation (“the Company” or “Cognex”) invents and commercializes technologies that address some of the most critical manufacturing and distribution challenges. We are a leading global provider of machine vision products and solutions that improve efficiency and quality in a wide range of businesses across attractive industrial end markets. Our solutions blend physical products and software to capture and analyze visual information, allowing for the automation of manufacturing and distribution tasks for customers worldwide. Machine vision products are used to automate the manufacturing or distribution and tracking of discrete items, such as mobile phones, electric vehicle batteries, and e-commerce packages, by locating, identifying, inspecting, and measuring them. Machine vision is particularly valuable for applications in which human vision is inadequate to meet requirements for size, accuracy, or speed, or in instances where substantial cost savings are obtained through the reduction of labor or improved product quality.

Cognex operates in one segment. We offer a variety of machine vision products that have similar economic characteristics and are distributed by the same sales channels to the same types of customers. Cognex sells to customers in nearly all industries in which discrete items are manufactured on an assembly line or moved through a distribution center. Our largest industries by revenue are the automotive, logistics, and consumer electronics industries, which combined represented approximately 65% of our total revenue in 2023. Cognex was incorporated in Massachusetts in 1981.

Our Industry

Machine vision is used in a variety of industries where technology is widely recognized as an important component of automated production, distribution, and quality assurance. Virtually every manufacturer or logistics provider can achieve better quality and efficiency by using machine vision. This results in a broad base of customers across a variety of industries, including automotive, logistics, consumer electronics, medical-related, semiconductor, consumer products, and food and beverage.

Cognex is one of the leading machine vision companies in the world. Our competitors include other vendors of machine vision systems, controllers, and components; manufacturers of image processing systems, sensors, and components; and system integrators. We also compete with internal engineering departments of current or prospective customers, as well as open-source tools available for free from various companies.

Cognex’s ability to compete depends on our ability to design new products and functionality that meet evolving customer requirements, and then to manufacture and sell those high-quality products in a timely manner. The primary competitive factors affecting the choice of a machine vision system include product functionality and performance, ease of use, vendor reputation, price, and post-sales support. The importance of each of these factors varies depending on the specific needs of the customer.

Our Business Strategies

Expansion of market position

Our goal is to expand our position as a leading worldwide machine vision provider by growing in our core markets, as well as expanding into new markets and with new customers.

We continue to invest in our core markets, such as automotive, logistics, and consumer electronics where we are a leading provider of vision and ID products for factory and warehouse automation. Within these markets, we are

making significant investments to focus on what we believe to be the fastest-growing applications and use cases. In the logistics market, we are moving beyond barcode reading into more complex applications in distribution centers and parcel and post warehouses. In the automotive market, we are developing new solutions for fast-growing electric vehicle and battery manufacturers and suppliers.

We reach a broad base of customers through our worldwide direct sales force that sells primarily to large, strategic customers, as well as through our network of distributors and integrators that sell primarily to smaller customers who may be more geographically remote or may require supplemental technical support or integration assistance. Our “Emerging Customer” sales initiative is expanding our sales force to reach customers new to factory automation or new to Cognex, who have yet to fully benefit from all that machine vision can offer. We believe these potential customers are increasingly looking for automation solutions that are easy to implement, easy to use, and provide the best technology. We expect our Emerging Customer strategy to broaden our reach, increase penetration, and further diversify our customer base.

Growth through innovation

We invest heavily in research and development to maintain our position as a technology leader in machine vision. We invest in technology that addresses the most challenging vision applications, such as our deep learning vision software that solves complex applications with unpredictable defects and deviations. We also invest in technology that makes vision easier to use and more affordable, and therefore, available to a broader base of customers, such as our vision sensor products that enable customers with less technical capabilities to use machine vision while minimizing installation and applications support.

Inorganic growth

We plan to drive inorganic growth through expansion in adjacent markets. We are focusing specifically on markets in which we expect our products and solutions, application expertise, and customer and industry relationships to enable us to provide significant value to end-users.

We seek out selective opportunities in new applications and markets through the acquisition of businesses and technologies that are synergistic with our core markets. We are selective in choosing businesses and technologies that we believe will enhance long-term growth and profitability. In the fourth quarter of 2023, we acquired Moritex Corporation, a global provider of premium optical components based in Japan. With an enterprise value of approximately \$270 million, this was Cognex's largest acquisition to-date. We plan to continue to seek acquisition opportunities to expand our product lines, customer base, distribution network, and technical talent.

Sustainable profitability

We prioritize choosing growth opportunities that we believe will maintain our gross margin percentages, which have averaged in the low to mid-70 percent range in the past several years and reflect the value that we believe our customers place on our innovative products. Our relatively high gross margins have the potential to provide us with strong incremental profit margins, leading to high operating leverage in our financial model.

Culture

Our strong and unique corporate culture reinforces our values of customer first and innovation, and enables us to attract and retain smart, enthusiastic, and creative talent who are motivated to solve the most challenging vision tasks for customers.

Our End Markets

Automotive

The automotive market has been one of our largest markets for the past twenty years. Machine vision is used in almost every step of vehicle manufacturing, from measuring inbound parts, to guiding robot assembly, to inspecting the stitching on leather seats. We currently expect the proliferation of electronics in automobiles to be a significant growth driver in both electric vehicles and internal combustion engine vehicles. For example, innovations in safety, driver assist, and entertainment features increase the number of items to be placed, tracked, measured, and inspected by machine vision.

We also anticipate a multi-year wave of investment in Electric Vehicle (“EV”) manufacturing equipment, particularly related to battery manufacturing and inspection. Cognex works closely with the major EV battery manufacturers who we believe produce the majority of the world’s automotive batteries. We believe that these manufacturers are positioned to grow within Asia, and to expand both independently and through partnerships in the Americas and Europe. We expect our existing relationships and proven offerings to position us to capture a significant share of this growth. These anticipated trends may offset expected reductions in traditional powertrain investments on internal combustion engine vehicles, leading to growth in the automotive market.

Consumer Electronics

We anticipate major investments in new generations of consumer electronics. A significant amount of visual inspection in consumer electronics is still done manually by humans. As labor becomes more costly and increasingly scarcer, these customers are looking for productivity initiatives to automate these processes. We also expect leading companies in this space to continue to grow based on new technologies that we expect to succeed and build on the smartphone. We believe new devices will be difficult to manufacture on a large scale, and therefore will require more innovative vision products in that process. Cognex has close relationships with the largest and most sophisticated companies in the consumer electronics market, and we expect to be a partner of choice as they bring new technologies to market.

Logistics

We believe our e-commerce logistics business is differentiated by the high performance of our bar-code reading and that potential growth will be driven by retailers investing in online fulfillment. From an automation perspective, the logistics industry is still in its early stages with a large reliance on human labor and a low rate of robotic automation. Beyond barcode reading, we expect vision applications in logistics to grow quickly and become a more substantial business for us. Vision applications include tasks such as inspecting packages for damage, object and symbol recognition, and dimensioning. Geographically, our current logistics business is primarily within the United States, but, over the long term, we expect to realize the highest rates of growth in Europe and Asia, where we believe customers are beginning to catch up with the United States in logistics automation technology and are moving away from local incumbent suppliers. Leading e-commerce players have taken a post-pandemic “time out” to absorb excess capacity since early 2022, but we currently continue to expect logistics to be our highest-growth end market over the mid to long-term.

Medical-Related

Cognex has an established customer base of life science equipment suppliers. Our products are specified in over 100 different machine designs, many of which are in the process of obtaining regulatory approval. As they launch, we believe they will provide the opportunity to deliver many years of recurring revenue. Applications in this market include lab automation and medical device inspection applications. During the COVID pandemic, we saw demand for machine vision grow from manufacturers of diagnostic tests, vaccines, and protective equipment.

Other

The number of end markets that can benefit from machine vision applications is expanding. Other end market uses of Cognex machine vision include semiconductor manufacturers identifying defects, regulated manufacturers reducing counterfeiting, food producers improving food safety, and manufacturers using 3D measurement for robotic guidance.

Products and Technology

Cognex offers a full range of machine vision systems and sensors, vision software, and industrial image-based barcode readers designed to meet customer needs at different performance and price points. Our products range from deep learning solutions that solve complex applications with unpredictable defects and deviations, to lower-cost vision sensors that conduct simple presence/absence inspections. Our products have a variety of physical forms, depending on the user's needs. For example, customers can purchase vision software to use with their own camera and processor, or they can purchase a standalone unit that combines camera, processor, and software into a single package.

Vision Systems and Sensors

Vision systems combine smart cameras and software to perform a wide range of tasks including part location, identification, measurement, assembly verification, and robotic guidance. Vision sensors can deliver an easy-to-use, low-cost, reliable solution for simple pass/fail inspections, such as checking the presence and size of parts. In-Sight® vision systems and sensors include our 2D and 3D vision systems, as well as our In-Sight SnAPP™ sensor. These products leverage various forms of artificial intelligence, including rule-based coding, as well as deep learning and edge learning technology leveraging pre-trained models powered by neural networks. Our product portfolio meets the varying price and performance requirements of our broad base of industrial customers. Our deep learning-based systems automate and solve complex inline inspections that typically require human judgment for defect detection, optical character recognition (OCR), assembly verification, or classification. Similar to our deep learning-based systems, our edge learning-based systems use pre-trained models, but on simpler applications that prioritize ease of use and have a broader appeal with easier and faster implementation and training.

Vision Software

Vision software offers customers the flexibility of the Cognex® vision tools library to use with the cameras, frame grabbers, and peripheral equipment of their choice. Cognex VisionPro® software offers an extensive suite of patented vision tools, including both traditional rule-based tools and deep learning-enabled tools, for advanced programming. Its QuickBuild™ prototyping environment allows customers to build complete vision applications with the simplicity of a graphical flowchart-based programming interface.

Industrial Image-Based Barcode Readers

Cognex industrial image-based barcode readers quickly and reliably read 1D, 2D, label-based, and direct part mark (DPM) codes found in nearly every industry including automotive, logistics, consumer products, and medical-related. The DataMan® product line, which includes fixed-mount and handheld models, as well as barcode verifiers, help organizations optimize performance, increase throughput, and control traceability.

Vision Accessories

Cognex vision accessories are designed for easy integration with Cognex products and applications. Cameras are available in both area scan and line scan formats to address a wide variety of applications. Lenses and lighting are also available in both embedded and component formats to provide high-quality image acquisition, including a portfolio of premium optical components that were added to the Company's vision accessory portfolio with the acquisition of Moritex Corporation in the fourth quarter of 2023. From value solutions to high-performance hardware, Cognex offers industrial cameras, lenses, lighting, vision controllers, frame grabbers, and I/O cards to meet any requirement.

Research, Development, and Engineering

Cognex engages in research, development, and engineering (RD&E) to enhance our existing products and to develop new products and functionality to address market opportunities. We believe that a continued commitment to RD&E activities is essential to maintain or achieve product leadership with our existing products and to provide innovative new product offerings, as well as to provide engineering support for large customers. In addition, we consider our ability to accelerate time to market for new products to be critical to our revenue growth. We incurred RD&E costs of approximately \$139 million (17% of revenue), \$141 million (14% of revenue), and \$135 million (13% of revenue) for the years ended December 31, 2023, 2022 and 2021, respectively. We expect to continue our commitment to RD&E, even during periods of lower revenue levels, to introduce new platforms, products, and solutions throughout economic cycles.

Intellectual Property

We rely on the technical expertise, creativity, and knowledge of our personnel, and therefore, we utilize patent, trademark, copyright, and trade secret protection to maintain our competitive position and protect our proprietary rights in our products and technology. While our intellectual property rights are important to our success, we believe that our business as a whole is not materially dependent on any particular patent, trademark, copyright, or other intellectual property right.

Operations

Most of Cognex's hardware products are manufactured utilizing third-party contractors, whereby the majority of component procurement, system assembly, and initial testing are performed by electronics manufacturing services suppliers. With the acquisition of Moritex Corporation in the fourth quarter of 2023, Cognex began in-house manufacturing of optical components, such as lenses and lighting. Cognex's primary contract manufacturer is located in Indonesia. Our contract manufacturers use specified components sourced from vendor lists approved by Cognex and assembly/test processes created and controlled by Cognex. After the completion of initial testing, assembled products from our contract manufacturers are routed to our distribution centers where trained Cognex personnel load Cognex software onto the products, provide additional assembly and image alignment as needed, and perform quality control procedures. Cognex ships finished products for customers located in the Americas from our Southborough, Massachusetts distribution center, for customers located in Europe from our Cork, Ireland distribution center, and for customers located in Asia from our Singapore distribution center that became operational during the fourth quarter of 2023.

Sales Channels and Support Services

Cognex sells its products through a worldwide direct sales force that primarily focuses on the development of strategic accounts which generate or are expected to generate significant sales volume, as well as through a global network of distribution and integration partners. Our distribution partners provide sales and local support to help Cognex reach the many prospects for our products in factories around the world, and our integration partners are

experts in vision and complementary technologies that can provide turnkey solutions for complex automation projects using vision. Through each of these channels, sales engineers call directly on targeted accounts, with the assistance of application engineers, and manage the activities of our distribution and integration partners within their territories in order to provide an advantageous sales model for our products. In 2023, we began ramping up an Emerging Customer sales force that primarily focuses on selling into accounts which are new to machine vision or Cognex.

Sales to customers based outside of the United States represented approximately 66% of our total revenue in 2023, with approximately 26% from customers based in Europe, approximately 20% from customers based in Greater China, and approximately 20% from customers based in other regions outside the United States. Sales to customers based in Europe are denominated in Euros and U.S. Dollars, sales to customers based in Greater China are denominated in Renminbi for sales within Mainland China and U.S. Dollars in other territories, and sales to customers based in other regions are denominated in U.S. Dollars, Korean Won, Japanese Yen, Mexican Pesos, and Indian Rupee.

Cognex's service offerings represent less than 10% of our total revenue and include maintenance and support, consulting, and training services. Maintenance and support programs include hardware support programs that entitle customers to have products repaired, as well as software support programs that provide customers with application support and software updates to the latest software releases. Application support is provided by technical support personnel located at Cognex regional offices, as well as by field service engineers that provide support at the customer's production site. We provide consulting services that range from a specific area of functionality to a completely integrated installed application. Training services include a variety of product courses that are available at our offices worldwide, at customer facilities, and online.

Human Capital

Our employees are our most valuable asset and are critical to our success. We create and maintain an environment where "Cognoids," a unique name for our employees, can engage with each other, perform their best work, develop their careers, and be creative. As of December 31, 2023, Cognex employed 2,992 Cognoids globally, including 1,590 in sales, marketing, and service activities; 690 in research, development, and engineering; 445 in manufacturing and quality assurance; and 267 in information technology, finance, and administration. Of our 2,992 Cognoids, 1,996 are based outside of the United States.

Culture and Values

We pride ourselves on having a unique culture that exemplifies our motto of *Work Hard, Play Hard, Move Fast*. Our culture guides the actions and behaviors of our Cognoids and is defined by our ten values - *Customer First, Excellence, Perseverance, Enthusiasm, Creativity, Pride, Integrity, Recognition, Sharing, and Fun*. We are committed to finding the very best talent to be part of our growing technology company. We believe our culture enables us to attract and retain smart, energetic, and creative talent, and is central to our ability to execute our operating plans and strategic initiatives. To preserve and enhance our corporate culture, while recognizing differences across and within regions, we have a global team of Cognoids who serve as Ministers of Culture, led by our Chief Culture Officer.

We believe in investing in tools and resources that support employees' learning and development and setting a compensation structure that reflects the Company's commitment to a pay-for-performance philosophy. We believe these efforts align with our stockholders' long-term interests and better position Cognex to continue to operate as a leader in the machine vision industry.

Diversity, Equity, Inclusion, and Belonging

While we are incredibly proud of our culture, we continue to listen, learn, and grow. We are excited about the opportunities to continue to build an organization that reflects the best of the world around us. As a multi-national company where over half our Cognoids live outside the United States, diversity means different things to different groups. We are building strategies and plans to continue to enhance our diversity, equity, inclusion, and belonging (DEIB) initiatives. One specific place where this evolution is visible is through the launch of our DEIB Council. The Council is led by our Chief Culture Officer and is comprised of over thirty volunteer Cognoids representing a broad cross-section of functions, geographies, and backgrounds.

Regulatory Compliance

Cognex's capital expenditures, earnings, and competitive position are not materially affected by compliance with federal, state, and local environmental provisions which have been enacted or adopted to regulate the distribution of materials into the environment.

Available Information

Cognex maintains a website at www.cognex.com. We make available, free of charge, on our website in the "Company" section under the caption "Investor Information" followed by "Financial Reports" and then "SEC Filings," our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including exhibits, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC. Cognex's reports filed with, or furnished to, the SEC are also available at the SEC's website at www.sec.gov. Cognex has used, and intends to continue to use, its investor relations website as means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Information contained on our website is not a part of, or incorporated by reference into, this Annual Report on Form 10-K or in any other document or report that Cognex files with the SEC, and any references to Cognex's website are intended to be inactive textual references only.

ITEM 1A: RISK FACTORS

The risks and uncertainties described below are not the only ones that we face. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect our company in the future. If any of these risks were to occur, our business, financial condition, or results of operations could be materially and adversely affected. This section includes or refers to certain forward-looking statements. We refer you to the explanation of the qualifications and limitations of such forward-looking statements, appearing under the heading "Forward-Looking Statements" in Part II - Item 7 of this Annual Report on Form 10-K.

Risks Related to Execution of our Business Strategy

Our failure to introduce new products in a successful and timely manner could result in the loss of our market share and a decrease in our revenues and profits.

The market for our products is characterized by rapidly changing technology and increasingly capable competitors. Accordingly, we believe that our future success will depend on our ability to accelerate time-to-market for new products with improved functionality, ease-of-use, performance, and price. This includes continuing to introduce products embedded with artificial intelligence technology that augments rule-based machine vision with image-based analysis. There can be no assurance that we will be able to introduce new products in accordance with scheduled release dates or that new products will achieve market acceptance. Our inability to keep pace with the rapid rate of technological change and customer demands in the high-technology marketplace could have a material adverse effect on our operating results.

Product development is often a complex, time-consuming, and costly process involving significant investment in research and development with no assurance of return on investment. Our strong balance sheet allows us to continue to make significant investments in research, development, and marketing for new products and technologies. Research is by its nature speculative, and the ultimate commercial success of a product depends on various factors, many of which are not under our control. We may not achieve significant revenue from new product investments for several years, if at all. Moreover, new products, if introduced, may not generate the gross margins that we have experienced historically.

Increased competition may result in decreased demand or prices for our products and services and may harm our operating results.

The machine vision market continues to be fragmented and competitive. Our competitors include primarily other vendors of machine vision systems, controllers, and components; manufacturers of image processing systems, sensors, and components; and system integrators. We also compete with internal engineering departments of current or prospective customers, as well as open-source tools available for free from various companies, including tools using artificial intelligence. In recent years, we have encountered increased competition from low-cost vision providers in China, as well as from large technology companies that may offer free open-source solutions. Any of these competitors may have greater financial or other resources than we do or may develop more compelling technologies. We may not be able to compete successfully in the future and our investments in research and development, sales and marketing, and support activities may be insufficient to enable us to maintain our competitive advantage. In addition, competitive pressures could lead to price erosion that could have a material adverse effect on our gross margins and operating results.

Further, in recent years, we have seen some examples of industry consolidation in our markets. This trend may continue as companies attempt to strengthen or hold their market positions in an evolving industry and as companies are acquired or are unable to continue operations. We believe that industry consolidation may result in stronger competition and may be accompanied by pressure from customers for lower prices. This could lead to more variability in our operating results and could have a material adverse effect on our business, operating results, and financial condition.

If we fail to attract and retain key talent and maintain our unique corporate culture, our business and operating results could suffer.

To support our growth and execute our operating plans and strategic initiatives, we must effectively attract, train, develop, motivate, and retain skilled employees, while maintaining our unique corporate culture. Technical personnel with experience in machine vision, and more recently artificial intelligence and transformer-based models, are in high demand and competition for their talents is intense. We rely on attracting and retaining talent with these skills to execute our product development plans. We use time-based and performance-based equity awards, including stock options and restricted stock units ("RSUs") as a key component of compensation for our more senior employees to align employee interests with the interests of our shareholders, provide competitive compensation packages, and encourage employee retention. Our stock price volatility may cause periods of time during which option exercise prices might be less than the sale price of our common stock or the value of RSUs might be less competitive, which may lessen the retentive attributes of these awards. We are limited as to the number of stock options and RSUs that we may grant under our stock plans, and we are unsure how effective different stock-based awards with different vesting schedules will be to retain key talent. Accordingly, we may find it difficult to attract and retain employees, and any such difficulty could materially adversely affect our business.

Our failure to properly manage the distribution of our products and services could result in the loss of revenues and profits.

We utilize a direct sales force, as well as a network of distribution and integration partners, to sell our products and services. We are continually reviewing our go-to-market strategy to help ensure that we are reaching the most customers that we can and with the highest level of service. At times, this may require strategic changes to our sales organization or enlisting or dropping various partners in certain regions, which could result in additional costs or operational challenges. In connection with our "Emerging Customer" sales initiative, we are expanding our sales force to reach customers who may be newer to factory automation and have yet to fully benefit from all that machine vision can offer, which has resulted, and is expected to continue to result, in increased sales and marketing expenses. In addition, successfully managing the interaction of our direct and indirect sales channels, including the newly-added Emerging Customer sales force, to reach various potential customers for our products and services is a complex process.

Many of our indirect selling arrangements are non-exclusive, and our distributors are not obligated to buy our products. Thus, they may be unwilling or unable to dedicate the resources necessary to promote our products or remain sufficiently trained to provide integration support. In addition, failure of our distributors to adhere to our policies designed to promote compliance with global anti-corruption laws, export controls, and local laws, could subject us to criminal or civil penalties and stockholder litigation. In addition, when we use indirect selling methods, it may reduce visibility to demand and pricing.

To support the expansion of our business internationally, we may decide to make changes to our operating structure in other countries when we believe these changes will make us more competitive by reaching additional customers, offering faster delivery, importation services, and/or local currency sales. These new operating models may require changes in legal structures, business systems, and business processes that may result in significant business disruption and negatively impact our customers' experience, resulting in loss of sales. Furthermore, as we assume more responsibility for the importation of our products into other countries, we face higher compliance risk to adhere to local regulatory and trade requirements. Finally, the local stocking of finished products in countries outside of our primary distribution centers may result in higher costs and increased risk of excess or obsolete inventory associated with maintaining the appropriate level and mix of products in multiple inventory locations, resulting in lower gross margins.

Our go-to-market strategy has distinct risks and costs, and therefore, our failure to implement the most advantageous balance in the sales and operating model for our products and services could have a material adverse effect on our revenue and profitability.

Economic, political, and other risks associated with international sales and operations could adversely affect our business and operating results.

In 2023, approximately 66% of our revenue was derived from customers located outside of the United States. We anticipate that international sales will represent a more significant portion of our revenue in 2024 due to the acquisition of Japan-based Moritex Corporation in the fourth quarter of 2023. In addition, we source components from suppliers located outside of the United States, including China, utilize third-party contract manufacturers, primarily located in Indonesia and Malaysia, to assemble certain of our products, and beginning in the fourth quarter of 2023 with the acquisition of Moritex Corporation, manufacture optical components at production plants located in Vietnam and China. We intend to continue to expand our sales and operations outside of the United States and expand our presence in international emerging markets. As a result, our business is subject to the risks inherent in international sales and operations, including, among other things:

- various regulatory and statutory requirements,
- difficulties in injecting and repatriating cash,
- export and import restrictions,
- trade tariffs,
- transportation delays,
- product certification requirements,
- employment regulations and local labor conditions,
- difficulties in staffing and managing foreign operations, particularly as we expand our presence globally
- corruption,
- instability in economic or political conditions,
- political or trade sanctions,
- difficulties protecting intellectual property,
- uncertainties surrounding the interpretation and application of regulatory and statutory requirements,
- varying data protection and privacy laws,
- business systems connectivity issues, and
- potentially adverse tax consequences.

Any of these factors could have a material adverse effect on our business, operating results or financial condition.

We face several risks related to conducting business in China. In recent years, trade tariffs imposed by the United States on certain components imported from Chinese suppliers resulted in higher costs for our products, which, to date, have not been material to our total cost of goods. In addition to trade tariffs, U.S. export controls that place restrictions on the exportation of our products or a subset of our products, including applicable regulations promulgated by the U.S. Commerce Department's Bureau of Industry and Security, have had a negative impact on our revenue from customers based in China. Trade tariffs and export controls also have had an indirect impact on the economic climate in China, which in turn, has had a negative impact on the Company's revenue from customers based in China who see risk in doing business with a U.S. company. The imposition of additional tariffs or other trade barriers could increase our costs in certain markets and may cause our customers to find alternative providers of machine vision products and services. To date, the impact of these restrictions has been immaterial to our total revenue and costs; however, if disputes and conflicts continue or further escalate, actions by governments in response could be significantly more severe and restrictive and could materially adversely affect our operating results.

An escalation of the China-Taiwan conflict could lead to challenges procuring integrated circuit chips from Taiwan-based vendors that are fundamental to the design of our products. Although we are taking steps to mitigate this risk, including purchasing chips in advance of demand, there can be no assurance that these steps will be successful in securing an adequate supply of chips at our current cost structure. Geopolitical tensions, trade disputes, and concerns about supply chain resilience have prompted some multinational companies to reassess their operations in China. Rising labor costs, intellectual property concerns, and uncertainties around regulatory environments have contributed to a trend where certain industries, particularly in manufacturing, are exploring diversification of their production bases to other countries or reshoring to their home country. These trends may adversely affect our revenue in China and operating results.

To date, the Russia-Ukraine war that has been ongoing since the first quarter of 2022 and the Israel-Hamas war that began in the fourth quarter of 2023 have not had a material adverse effect on our business. Economic sanctions and export controls imposed by the United States and other countries targeting specific industries, entities, and individuals in Russia, as well as the impact on the supply of energy resources in Europe, have not materially adversely affected our business to date. Further escalation of these geopolitical tensions, however, could have a broader impact which could adversely affect our business and/or our supply chain, distribution and integration partners, or customers in the broader region, including the European Union. Furthermore, instability may lead to increased market volatility, negatively impacting customer confidence and spending.

We also are subject to applicable anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, and similar anti-corruption and anti-kickback laws in the jurisdictions in which we operate. These laws generally prohibit offering, promising, giving, or authorizing others to provide anything of value, either directly or indirectly, to a government official or private party in order to influence official action or otherwise gain an unfair business advantage, such as to obtain or retain business. Particularly as a result of our global operations, including in developing countries, and our growing international sales force, our relationships with our customers and resellers could expose us to liability under these laws. Violations of anti-corruption laws may result in severe civil and criminal penalties for noncompliance. Even an unsuccessful challenge or investigation into our practices is costly to defend, and could cause adverse publicity, and thus could have a material adverse effect on our business, financial condition, or operating results.

Implementation of our acquisition strategy may not be successful, which could affect our ability to increase our revenue or profitability and may otherwise adversely affect our business.

We have acquired, and may continue to acquire, new businesses and technologies. During the fourth quarter of 2023, we completed our largest acquisition to date by acquiring Moritex Corporation, a global provider of premium optical components based in Japan, for an enterprise value of approximately \$270 million. The Moritex acquisition, and acquisitions in general, may involve significant risks and uncertainties, which could include, among others:

- the diversion of management's attention from other operational matters,
- the inability to realize expected synergies or other benefits resulting from the acquisition, including the failure to achieve projected sales of acquired products,
- difficulties or delays integrating personnel, operations, technologies, products, processes, and systems of the acquired business, particularly in locations far from the Company's headquarters,
- the failure to retain key talent and difficulties integrating corporate cultures,
- entry into markets in which we may have limited prior experience and where competitors have stronger market positions,
- the inability to protect and secure acquired intellectual property or confidential information,
- difficulties or delays completing the development of acquired in-process technology,
- the failure to retain key customers,
- the impairment of acquired intangible assets resulting from lower-than-expected cash flows from the acquired assets,
- acquisition-related charges, which could adversely impact operating results and cash flows in any given period and could be substantially different from period to period,
- difficulties with implementing internal controls and accounting systems necessary to be compliant with requirements applicable to public companies subject to SEC reporting, and
- difficulties with closing a transaction due to regulatory approvals, employment matters, required consents, litigation, or other challenges, which could increase costs and prevent the acquisition from being completed within the expected timeframe, or from being completed at all.

Acquisitions are inherently risky and the inability to effectively manage these risks could have a material adverse effect on our operating results.

Risks Related to Information Technology and Intellectual Property

Information security breaches may adversely affect our business.

We rely on our information technology systems, including third-party services, to effectively run our business. We may be subject to information security failures or breaches caused by hacking, malicious software, acts of vandalism or terrorism, or other events. The risk of a cyberattack continues to increase given rapid advancements in technologies, as well as the proliferation of diplomatic and armed conflict throughout the world. Our security measures or those of our third-party service providers may not detect or prevent such breaches. Any such compromise to our information security could result in the distraction of management and diversion of information technology resources, theft of our intellectual property, including software source code, a misappropriation of our cash or other assets, an interruption in our operations, the unauthorized publication of our confidential business or proprietary information, the unauthorized release of customer, vendor, or employee data, and the exposure to litigation or regulatory penalties, any of which could harm our business and operating results. We have experienced cybersecurity incidents in the past, however, to date, these incidents have not had a material impact on our operations or financial results. Future cybersecurity incidents could have a material adverse effect on our business, reputation, financial condition, or operating results.

Changes in laws or regulations relating to data privacy or data protection, or any actual or perceived failure by us to comply with such laws and regulations, could harm our business.

We are subject to a variety of United States and international laws, rules, policies and other obligations regarding data protection and security breaches. Privacy and data security have become significant issues in the United States, Europe, and in many other jurisdictions where we conduct or may in the future conduct our operations. For instance, the European Union's General Data Protection Regulation ("GDPR"), many state and federal privacy laws within the United States, and other similar global laws in locations in which we do business govern our global data privacy practices. The regulatory framework for the collection, use, safeguarding, sharing, and transfer of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. For example, the California Privacy Rights Act (CPRA), which took effect on January 1, 2023 (with certain provisions of the CPRA having retroactive effect to January 1, 2022), as well as obligations from new privacy laws in Colorado, Connecticut, Delaware, Florida, Indiana, Iowa, Montana, New Jersey, Oregon, Tennessee, Texas, Utah and Virginia that have taken or will take effect between 2023 and 2026, may require us to further modify certain of our information practices and could subject us to additional compliance costs and expenses. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. Complying with emerging and changing requirements may be costly and require us to change certain business practices. Noncompliance could result in significant fines, penalties, claims, or legal liability. Any inability to adequately address privacy and data security concerns or comply with applicable privacy or data security laws, regulations, and policies could result in additional cost and liability to us, damage our reputation, inhibit sales, and harm our business.

If we fail to successfully protect our intellectual property, our competitive position and operating results could suffer.

We rely on our proprietary software technology and hardware designs, as well as the technical expertise, creativity, and knowledge of our personnel to maintain our position as a leading provider of machine vision products. Software piracy and reverse engineering may result in counterfeit products that are misrepresented in the market as Cognex products or pirated products that contain stolen technology, such as software. Although we use a variety of methods to protect our intellectual property, we rely most heavily on patent, trademark, copyright, and trade secret protection, as well as non-disclosure agreements with customers, suppliers, employees, and consultants. We also attempt to protect our intellectual property by restricting access to our proprietary information by a combination of technical and internal security measures. These measures, however, may not be adequate to:

- protect our proprietary technology,
- protect our patents from challenge, invalidation, or circumvention, or
- ensure that our intellectual property will provide us with competitive advantages.

Our pending and future patent applications may not issue as patents or, if issued, may not issue in a form that will provide us with any meaningful protection or any competitive advantage. Even if issued, existing or future patents may be challenged, narrowed, invalidated, or circumvented, which could limit our ability to stop competitors from developing and marketing similar products, increase costs, or limit the length of patent protection we may have for our products. Furthermore, other companies may design around technologies we have patented, licensed, or developed. Moreover, changes in patent laws or their interpretation in the United States and other countries could also diminish the value of our intellectual property or narrow the scope of our patent protection. In addition, the legal systems of certain countries do not favor the aggressive enforcement of patents, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar to ours. Any of these adverse circumstances could have a material adverse effect on our operating results.

Risks Related to our Supply Chain

The failure to manufacture and deliver products in a timely manner could negatively affect customer satisfaction and our operating results.

A significant portion of our products is presently manufactured by a third-party contractor located in Indonesia. Since 2022, we have been scaling up an additional contract manufacturer located in Malaysia, which is expected to further mitigate risk, diversify supply chain, and expand production capacity. With the acquisition of Moritex Corporation in the fourth quarter of 2023, we began in-house manufacturing of optical components, such as lenses and lighting, in production plants located in Vietnam and China. In-house manufacturing exposes us to various risks that could adversely impact our business operations and financial condition, including, but not limited to, (i) the health and safety of our employees engaged in manufacturing; (ii) the storage, use, and transportation of hazardous materials utilized in the manufacturing process; and (iii) legal risks related to environmental protection and health and safety laws in all applicable jurisdictions. Although our third-party and in-house manufacturers have the ability to shift production to plants in other regions when operations in their primary plant are disrupted, production and test equipment located at the plant that is unique to the manufacture of Cognex products creates practical challenges to doing so in a timely manner. Furthermore, the loss of a key supplier, or failure of a key supplier to access necessary credit to operate its business or otherwise remain in business, could have a material adverse impact on our operating results. Changes and additions to our supply chain require considerable time and resources and involve significant risks and uncertainties, and we can provide no assurance of return on, or success of, such investments.

We also rely on our third-party and in-house manufacturers to meet delivery schedules. We have experienced, and may continue to experience, delays in the delivery of our products from our suppliers due to the impact of global supply chain challenges or other factors. For example, on June 7, 2022, our primary contract manufacturer experienced a fire at its plant in Indonesia which destroyed a significant amount of Cognex-owned consigned inventories, as well as component inventories owned by the contract manufacturer that were designated for Cognex products. The fire resulted in delayed shipments, loss of sales, and higher-than-normal purchase costs to replenish component inventories which adversely impacted our business, financial condition, and results of operations primarily during the second half of 2022, with the gross margin impact of higher purchase costs continuing into the first half of 2023. Challenges in obtaining components and maintaining production have resulted in delays, and may continue to result in delays, in meeting our delivery schedules that, as a result, delay deliveries to our customers past their requested delivery date. Delays in customer orders also can result in delayed revenue recognition or loss of business which can impact our operating results in a particular reporting period.

Our inability to obtain components for our products could adversely affect our operating results.

Certain key electronic and mechanical components, such as integrated circuit chips, are fundamental to the design of Cognex products. Due to the impact of global supply chain challenges and other factors, we have experienced, and may continue to experience, disruptions to the supply of components for our products that have resulted, and may continue to result, in higher purchase costs, higher delivery costs, and manufacturing delays. An escalation of the China-Taiwan conflict could result in challenges procuring integrated circuit chips from Taiwan-based vendors. Although we are taking steps to mitigate this risk, including purchasing chips in advance of demand, there can be no assurance that these steps will be successful in securing an adequate supply of chips at our current cost structure.

We source components from preferred vendors that are selected based on price and performance considerations. In the event of a supply disruption from a preferred vendor, these components typically may be purchased from alternative vendors, which may result in higher purchase costs and manufacturing delays based on the time required to identify and obtain sufficient quantities from an alternative source. Certain Cognex products utilize components that are available from only one source. If we are unable to secure adequate supply from these sources, we may have to redesign our products, which may lead to higher costs, delays in manufacturing, and possible loss of sales.

Although we are taking certain actions to mitigate supply risk and have entered into agreements, including in broker markets, for the supply of many components, there can be no assurance that Cognex will be able to extend or renew these agreements on similar terms, such as purchase prices, or at all. Component suppliers may suffer from poor financial conditions, which can lead to business failure for the supplier, further limiting our ability to obtain sufficient quantities of components on reasonable terms, or at all. Therefore, Cognex remains subject to risks of supply shortages and price increases that can adversely affect our business and operating results.

Our failure to effectively manage product transitions or accurately forecast customer demand could result in excess or obsolete inventory and resulting charges.

Because the market for our products is characterized by rapid technological changes, we frequently introduce new products with improved functionality, ease-of-use, and performance, or lower cost that may replace existing products. Among the risks associated with the introduction of new products are difficulty predicting customer demand and effectively managing inventory levels to ensure adequate supply of the new product and avoid excess supply of the legacy product. Our failure to effectively manage product transitions or accurately forecast customer demand, in terms of both volume and configuration, may lead to an increased risk of excess or obsolete inventory and resulting charges.

We strategically may enter into non-cancelable and/or non-refundable commitments with vendors to purchase inventory in advance of demand to address concerns about the availability of future supplies, build safety stock to help ensure customer shipments are not delayed should we experience higher than anticipated demand for inventory with long lead times, or take advantage of favorable pricing. Supply chain disruptions and unanticipated changes in demand have resulted, and may continue to result, in the Company purchasing a significant amount of inventory in advance of demand. These measures to purchase inventory may expose us to an increased risk of excess or obsolete inventory and resulting charges if actual demand is lower than anticipated.

If components purchased by our primary contract manufacturer have not been consumed in the production of our finished goods within a certain period of time, we have been required, and may continue to be required, to purchase these components from our primary contract manufacturer and later sell them back when they are needed to meet our demand. While we typically expect these components to be consumed in the production of our finished goods, this arrangement may expose us to an increased risk of excess or obsolete inventory and resulting charges.

Disruptions to one of our distribution centers could adversely affect our operating results.

We ship finished products for customers located in the Americas from our Southborough, Massachusetts distribution center, for customers located in Europe from our Cork, Ireland distribution center, and for customers located in Asia from our Singapore distribution center that became operational during the fourth quarter of 2023. Following the COVID pandemic, we experienced, and may experience again, labor shortages or working restrictions due to factors such as health and safety concerns or governmental regulations. Although we have the ability to shift operations from one distribution center to another, there are practical challenges to doing so in a timely, cost-effective manner, and we may experience delays in shipping customer orders. These delays could negatively impact customer satisfaction and, in turn, cause loss of sales, which could adversely affect our operating results.

Our products may contain design or manufacturing defects, which could result in reduced demand, significant delays, substantial costs, or customer dissatisfaction and/or loss of sales.

If flaws in either the design or manufacture of our products were to occur, we could experience a rate of failure in our products that could result in significant delays in shipment and material repair or replacement costs. Due, in part, to our focus on releasing new products as quickly as possible to satisfy customer demands, our release-to-market process may not be robust enough to detect significant design flaws or software bugs. While we engage in product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers and contract manufacturers, these actions may not be sufficient to avoid a product failure rate that results in:

- substantial delays in shipment,
- significant repair or replacement costs,
- product liability claims or lawsuits, particularly in connection with life sciences customers, electric vehicle battery manufacturers, or other high-risk end-user industries,
- customer dissatisfaction and/or loss of sales, or
- potential damage to our reputation.

Any of these results could have a material adverse effect on our operating results.

Risks Related to Revenue Concentrations

The loss of, or significant curtailment of purchases by, large customers could have an adverse effect on our business.

In 2023, no single customer represented more than 10% of our total revenue. However, we have had customers of this size in the past, particularly in the logistics and consumer electronics industries. Large customers may divert management's attention from other operational matters and pull resources from other areas of the business, resulting in potential loss of sales from other customers. In addition, large customers may receive preferred pricing and a higher level of support, which may lower our gross margin percentage. Furthermore, in certain instances, due to long supplier lead times, we may purchase inventory in advance of receipt of a large customer purchase order, which exposes us to an increased risk of excess or obsolete inventory and resulting charges. The loss of, or curtailment of purchases by, any one or more of our large customers, has had, and could in the future have a material adverse effect on our operating results.

Risks Related to Financial Matters

We are at risk for impairment charges with respect to our investments or acquired intangible assets, which could have a material adverse effect on our operating results.

As of December 31, 2023, we had approximately \$374 million of debt securities in our investment portfolio. These debt securities are reported at fair value, with unrealized gains and losses, net of tax, included in shareholders' equity as other comprehensive income (loss) since these securities are designated as available-for-sale securities. As of December 31, 2023, our portfolio of debt securities had a net unrealized loss of \$9,967,000. Included in this net loss, were gross unrealized losses totaling \$10,555,000, of which \$1,561,000 were in a loss position for less than twelve months and \$8,994,000 were in a loss position for greater than twelve months. Management monitors its debt securities that are in an unrealized loss position to determine whether a loss exists related to the credit quality of the issuer that would be reported in current operations. While management currently intends to hold these securities to full value recovery at maturity, we may determine to sell these securities prior to maturity to fund our operations, make acquisitions, or for other purposes, which may result in a loss. It is our policy to invest in investment-grade debt securities that minimize our exposure to credit losses; however, no assurances can be made that we will not incur credit losses with respect to our securities portfolio. No credit losses were recorded in 2023.

As of December 31, 2023, we had approximately \$113 million in acquired intangible assets, consisting primarily of acquired technologies and customer relationships. The majority of these intangible assets were recorded in the fourth quarter of 2023 when Cognex acquired Moritex Corporation. These assets are susceptible to changes in fair value due to a decrease in the historical or projected cash flows from the use of these assets, which may be negatively impacted by economic trends. We evaluate long-lived assets for impairment annually each fourth quarter and whenever events or changes in circumstances, referred to as "triggering events," indicate the carrying value may not be recoverable. If we determine that any of these investments or intangible assets are impaired, we will be required to take a related charge to earnings that could have a material adverse effect on our operating results.

We may have additional tax liabilities and our effective tax rate may increase or fluctuate, which could adversely affect our operating results and financial condition.

As a multinational corporation, we are subject to income taxes, as well as non-income based taxes, in the United States and numerous foreign jurisdictions. Our effective income tax rate is dependent on the geographic distribution of our worldwide earnings or losses and the tax laws and regulations in each geographic region in which we operate. Significant judgment is required in determining our worldwide provision for income and other taxes. The application of tax laws and regulations is subject to legal and factual interpretation, judgment, and uncertainty, and tax laws themselves are subject to change. For example, many countries have recently adopted, or are considering the adoption of, revisions to their respective tax laws based on the Organization for Economic Co-operation and Development's ("OECD") Inclusive Framework, which could impact our tax liability due to our organizational structure and significant operations outside of the United States. Furthermore, we are subject to regular review and audit by both domestic and foreign tax authorities and may be assessed additional taxes, penalties, fees, or interest, which could have a material adverse effect on our financial position, liquidity, or results of operations.

Although we believe our tax positions are reasonable, the final determination of tax audits or any related litigation could be different from what is reflected in our financial statements and could have a material adverse effect on our income tax provision, net income, or cash flows in the period in which the determination is made.

Fluctuations in foreign currency exchange rates and the use of derivative instruments to hedge these exposures could adversely affect our reported results, liquidity, and competitive position.

We face exposure to foreign currency exchange rate fluctuations, as a significant portion of our revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of our subsidiaries or the reporting currency of our company, which is the U.S. Dollar. In certain instances, we utilize forward contracts to hedge against foreign currency fluctuations. These contracts are used to minimize foreign currency gains or losses, as the gains or losses on the derivative are intended to offset the losses or gains on the underlying exposure. We do not engage in foreign currency speculation. If the counterparty to any of our hedging arrangements experiences financial difficulties, or is otherwise unable to honor the terms of the contract, we may experience material losses.

The success of our foreign currency risk management program depends on forecasts of transaction activity denominated in various currencies. To the extent that these forecasts are overstated or understated during periods of currency volatility, we could experience unanticipated foreign currency gains or losses that could have a material impact on our results of operations. In addition, our failure to identify new exposures and hedge them in an effective manner may result in material foreign currency gains or losses.

In addition to the U.S. Dollar, a significant portion of our revenues and expenses are denominated in the Euro and Chinese Renminbi, and to a lesser extent the Korean Won, Japanese Yen, Mexican Peso, and Indian Rupee. We estimate that approximately 52% of our sales in 2023 were invoiced in currencies other than the U.S. Dollar, and we expect sales denominated in foreign currencies to represent a more significant portion of our total revenue in 2024 due to the acquisition of Japan-based Moritex Corporation in the fourth quarter of 2023. While we also have expenses denominated in these same foreign currencies, the impact on revenues has historically been, and is expected to continue to be, greater than the offsetting impact on expenses. Therefore, in times when the U.S. Dollar strengthens in relation to these foreign currencies, we would expect to report a net decrease in operating income. Conversely, in times when the U.S. Dollar weakens in relation to these foreign currencies, we would expect to report a net increase in operating income. Thus, changes in the relative strength of the U.S. Dollar may have a material impact on our operating results.

General Risk Factors

Unfavorable global economic conditions may negatively impact our operating results.

Our revenue levels are impacted by global economic conditions, as we have a significant business presence in many countries throughout the world. Unfavorable economic conditions, such as inflation, slower growth or recession, higher interest rates, tighter credit, and labor shortages, may cause companies to delay or reduce spending for automation projects, including those with machine vision, amid weaker general manufacturing confidence and heightened uncertainty around global trade. Furthermore, customer confidence and capital investment can be materially adversely impacted as a result of financial market volatility, negative financial news, declines in income or asset values, energy shortages and cost increases, labor and healthcare costs, and other global economic conditions. When global economic conditions are unfavorable, our revenue and our ability to generate operating profits could be materially adversely affected.

As a result of global economic conditions, our business is subject to the following risks, among others:

- our customers may not have sufficient cash flow or access to financing to purchase our products and services,
- our customers may not pay us within agreed upon terms or may default on their payments altogether,
- our suppliers may be unable to fulfill their delivery obligations to us in a timely manner,
- lower demand for our products may result in charges for excess and obsolete inventory if we are unable to sell inventory that is either already on hand or that we are committed to purchase,
- lower cash flows may result in impairment charges for acquired intangible assets or goodwill,
- a decline in our stock price may make stock-based awards a less attractive form of compensation and a less effective incentive for retention for our employees, and
- the trading price of our common stock may be volatile.

As of December 31, 2023, we had approximately \$576 million in cash and investments. In addition, we have no long-term debt. We believe that our strong cash position puts us in a relatively good position to weather economic downturns. Nevertheless, our operating results have been materially adversely affected in the past, and could be materially adversely affected in the future, as a result of unfavorable economic conditions and reduced capital spending by manufacturers and logistics companies worldwide.

Natural disasters, fires, energy shortages, widespread public health issues, or man-made disasters could result in business disruptions that may adversely affect our business and operating results.

Our business, and the businesses of our customers, suppliers, and third-party service providers, could be disrupted by natural disasters, fires, energy shortages, public health crises, such as pandemics and epidemics, man-made disasters, such as cyberattacks, terrorism or industrial accidents, or other events outside of our control. Certain of our business operations, such as our third-party primary contractor manufacturers in Indonesia and Malaysia, are in locations that may be more prone to earthquakes and other natural disasters, and global climate change may result in certain types of natural disasters occurring more frequently or with more intense effects. Following a business disruption, the Company could be subject to production downtimes, operational delays, substantial recovery time, customer claims, significant expenditures to resume operations, the diversion of management's attention and resources, or loss of business, any of which could have a material adverse effect on our competitive position, operating results, or financial condition. Because we rely on single or limited sources for the supply of certain components and manufacture of our products, a business disruption affecting such sources would worsen any adverse consequences to our business.

While we maintain insurance coverage for certain types of losses, such insurance coverage may be insufficient to cover all losses that may arise. The impact of any such business disruption is difficult to predict.

Expectations relating to environmental, social, and governance considerations expose the Company to potential liabilities, increased costs, reputational harm, and other adverse effects on our business.

Many governments, regulators, investors, employees, customers, and other stakeholders are increasingly focused on environmental, social, and governance considerations relating to businesses, including climate change and greenhouse gas emissions, human and civil rights, and diversity, equity, and inclusion. In addition, we make statements about our environmental, social, and governance goals and initiatives through our Sustainability Reports, information provided on our website, and other communications. In addition, future environmental laws and regulations have the potential to affect our operations, increase our costs, decrease our revenue, or change the way we design or manufacture our products. Responding to these environmental, social, and governance considerations and implementation of these goals and initiatives involves risks and uncertainties, requires investments, and depends in part on third-party performance or data that is outside of our control. We cannot guarantee that we will achieve our environmental, social, and governance goals and initiatives. In addition, some stakeholders may disagree with our goals and initiatives. Any failure, or perceived failure, to achieve our goals, further our initiatives, adhere to our public statements, comply with federal, state, or international environmental, social, and governance laws and regulations, or meet evolving and varied stakeholder expectations and standards could result in legal and regulatory proceedings against the Company and adversely affect our business, reputation, results of operations, financial condition, and stock price.

The price of the Company's stock is subject to volatility.

We have experienced substantial stock price volatility in the past and may continue to do so in the future. The price of our stock may be affected by factors such as our financial performance, announcements of technological innovations or new products by us or our competitors, market conditions, and other factors. Additionally, the Company, the technology industry, and the overall stock market have, from time to time, experienced extreme stock price and volume fluctuations that have affected stock prices in ways that may have been unrelated to these companies' operating performance. Price volatility may cause the average price at which we repurchase our stock in a given period to exceed the stock's price at a given point in time. We believe the price of our stock should reflect expectations of future growth and profitability. If we fail to meet expectations related to future growth, profitability, dividends, share repurchases, or other market expectations, the price of our stock may decline significantly, which could have a material adverse impact on investor confidence and employee retention.

Our Company may be subject to time-consuming and costly litigation or activist shareholder activities.

From time to time, we may be subject to various claims, demands, and lawsuits by competitors, shareholders, customers, distributors, patent trolls, former employees, or other parties arising in the ordinary course of business, including lawsuits charging patent infringement, or claims and lawsuits instituted by us to protect our intellectual property and confidential information, or for other reasons. These matters can be time consuming, divert management's attention and resources, and cause us to incur significant expenses. Furthermore, the results of any of these actions may have a material adverse effect on our operating results.

ITEM 1B: UNRESOLVED STAFF COMMENTS

None

ITEM 1C: CYBERSECURITY

Cybersecurity Risk Management

As part of our overall "Enterprise Risk Management" program, the Company has implemented a cybersecurity risk management program that is informed by recognized industry standards and frameworks. The cybersecurity risk management program includes a number of components, including information security program assessments, penetration testing, and threat simulation exercises that are conducted periodically by both internal and external resources, as well as continuous monitoring of critical risks from cybersecurity threats using automated tools. During onboarding and periodically thereafter, we conduct trainings for the Company's employees, contractors, and temporary workers about cybersecurity risks, including sending test phishing emails for training purposes to all users of the Company's email system.

As part of our cybersecurity risk management program, we maintain processes to assess and review the cybersecurity practices of third-party vendors and service providers, including utilization of software to evaluate, assess, and monitor cybersecurity risks posed by third parties that provide critical services or handle confidential information. Additionally, prior to engaging a critical third-party vendor or service provider, and periodically thereafter, we conduct security audits of such third parties, and, as appropriate, include security requirements in contracts.

We, like other companies in our industry, face a number of cybersecurity risks in connection with our business. Although such risks have not materially affected us, including our business strategy, results of operations, or financial condition, to date, we have, from time to time, experienced threats to and security incidents related to our data and systems, including denial of service and phishing attacks. For more information about the cybersecurity risks we face, see the risk factor entitled "Information security breaches may adversely affect our business" in Item 1A- Risk Factors.

Governance

Our cybersecurity risk management program and related operations and processes are managed by our Information Security team (the "IS Team"), which is led by the Senior Director of Information Security. The Senior Director of Information Security role is currently held by an individual who has approximately fifteen years of experience managing information security programs. The IS Team is responsible for assessing risks from cybersecurity threats, including their potential business impact and likelihood of occurrence, as well as implementing risk remediations and mitigations.

The IS Team provides reports on cybersecurity risk management processes to the Chief Financial Officer and other leaders of the Company on a quarterly basis, or as potentially critical risks from cybersecurity threats or incidents arise.

The IS Team provides reports on an annual basis to the Audit Committee, which oversees cybersecurity risks pursuant to the Audit Committee Charter. The Audit Committee periodically reports on cybersecurity risk management to the full Board of Directors. The Board of Directors, as a whole and through its committees, has responsibility for the oversight of risk management.

ITEM 2: PROPERTIES

In 1994, Cognex purchased and renovated a 100,000 square-foot building located in Natick, Massachusetts that serves as our corporate headquarters and is occupied by employees primarily in research, development, and engineering, manufacturing and quality assurance, and administration functions. In 1997, Cognex completed construction of a 50,000 square-foot addition to this building.

In 1995, Cognex purchased an 83,000 square-foot office building adjacent to our corporate headquarters that is occupied by employees primarily in marketing, service, information technology, and finance functions.

In 1997, Cognex purchased a three and one-half acre parcel of land adjacent to our corporate headquarters. This land is being held for future expansion and is currently used as an Ultimate Frisbee Field for our Cognoids.

In 2007, Cognex purchased a 19,000 square-foot building adjacent to our corporate headquarters that is currently used as a training center as part of our Emerging Customer sales initiative.

In 2014, Cognex purchased a 50,000 square-foot building in Cork, Ireland that serves as the distribution center for customers located in Europe.

In 2021, Cognex entered into a lease for a 65,000 square-foot building in Southborough, Massachusetts for a term of 10 years that serves as the distribution center for customers located in the Americas.

In June 2023, Cognex entered into a lease for a 115,000 square-foot building in Singapore for a term of 10 years and 6 months to serve as a new distribution center for customers located in Asia that became operational during the fourth quarter of 2023.

In connection with the acquisition of Moritex Corporation in the fourth quarter of 2023, the Company acquired a 162,000 square-foot building in Shenzhen, China and assumed a lease agreement for a 22,000 square-foot building in Bac Ninh, Vietnam, both of which serve as production plants for optical components.

Cognex conducts certain of its operations in other leased facilities, predominantly research, development, and engineering, sales, and administration functions. These lease agreements expire at various dates through 2033. Certain of these leases contain renewal options, leasehold improvement incentives, retirement obligations, escalation clauses, rent holidays, and variable payments tied to a consumer price index.

ITEM 3: LEGAL PROCEEDINGS

Various claims and legal proceedings generally incidental to the normal course of business are pending or threatened on behalf of or against the Company. While we cannot predict the outcome of these matters, we believe that any liability arising from them will not have a material adverse effect on our financial position, liquidity, or results of operations.

ITEM 4: MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5: MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's common stock is traded on The NASDAQ Stock Market LLC, under the symbol CGNX. As of January 28, 2024, there were approximately 625 shareholders of record of the Company's common stock. The Company believes the number of beneficial owners of the Company's common stock on that date was substantially greater.

In October 2018, the Company's Board of Directors authorized the repurchase of \$200,000,000 of the Company's common stock. Under this October 2018 program, in addition to repurchases made in prior years, the Company repurchased 957,000 shares at a cost of \$78,652,000 in 2021, which completed purchases under the October 2018 program.

In March 2020, the Company's Board of Directors authorized the repurchase of an additional \$200,000,000 of the Company's common stock. Under this March 2020 program, the Company repurchased 1,060,000 shares, including 5,000 shares that were repurchased in 2021 and settled in 2022, at a cost of \$83,000,000 in 2021, and 1,677,000 shares at a cost of \$117,000,000 in 2022, which completed purchases under the March 2020 program.

In March 2022, the Company's Board of Directors authorized the repurchase of an additional \$500,000,000 of the Company's common stock. Under this March 2022 program, the Company repurchased 1,682,000 shares at a cost of \$87,314,000 in 2022 and 1,723,000 shares at a cost of \$79,794,000 in 2023, including \$446,000 of buyback Excise Tax in accordance with the Inflation Reduction Act of 2022, leaving a remaining balance of \$332,892,000.

The Company may repurchase shares under this program in future periods depending on a variety of factors, including, among other things, the impact of dilution from employee stock awards, stock price, share availability, and cash requirements. The Company is authorized to make repurchases of its common stock through open market purchases, pursuant to Rule 10b5-1 trading plans, or in privately negotiated transactions.

The following table sets forth information with respect to purchases by the Company of shares of its common stock during each fiscal month of the fourth quarter of 2023:

	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 2 - October 29, 2023	74,000	\$ 34.98	74,000	\$ 350,436,000
October 30 - November 26, 2023	492,000	35.66 (1)	492,000	332,892,000 (1)
November 27 - December 31, 2023	—	—	—	332,892,000
Total	566,000	\$ 35.57	566,000	\$ 332,892,000

(1) Includes \$446,000 of buyback Excise Tax in accordance with the Inflation Reduction Act of 2022.

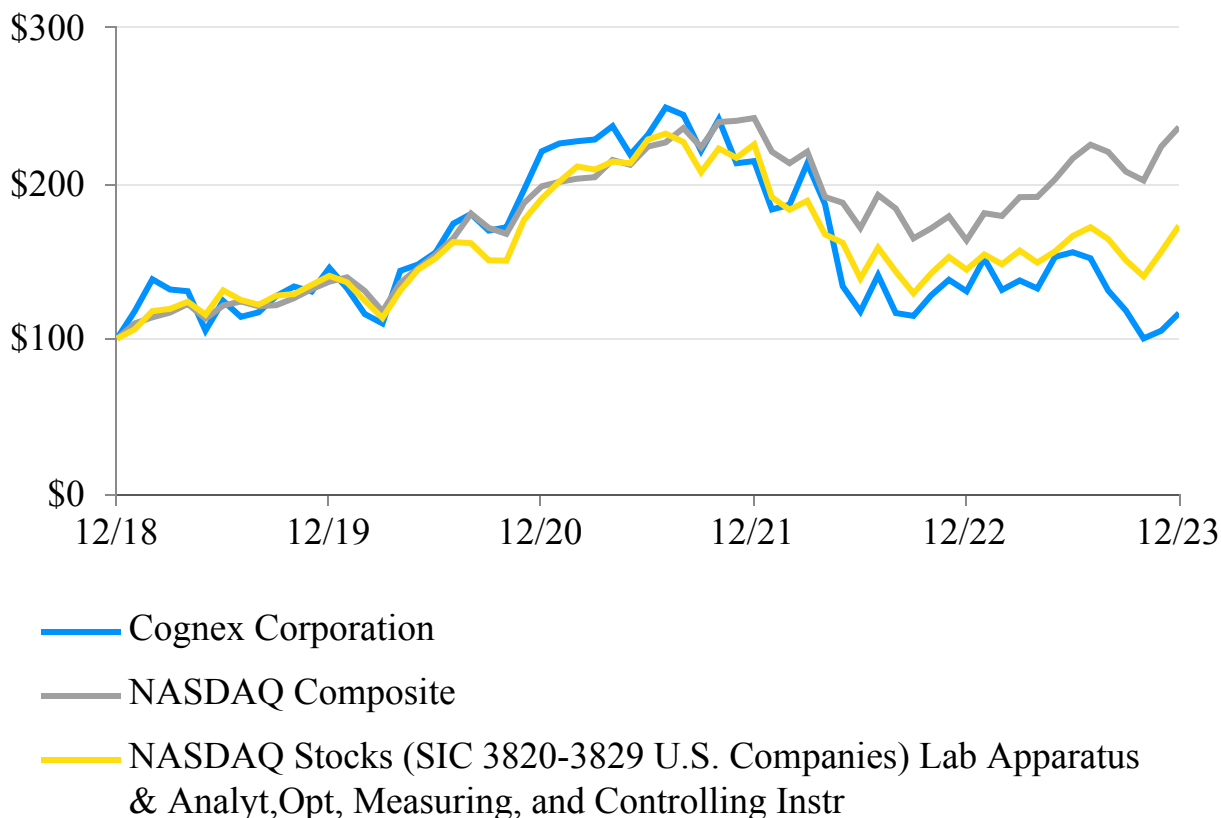
The information required by Item 5 of Form 10-K regarding equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report.

The Company's Board of Directors declared and paid cash dividends of \$0.060 per share in the first, second, and third quarters of 2021, \$0.065 per share in the fourth quarter of 2021 and in the first, second, and third quarters of 2022, and \$0.070 per share in the fourth quarter of 2022 and in the first, second, and third quarters of 2023. The dividend was increased to \$0.075 per share in the fourth quarter of 2023.

Total dividends paid were \$49,079,000 in 2023, \$45,921,000 in 2022, and \$43,263,000 in 2021. Future dividends will be declared at the discretion of the Company's Board of Directors and will depend on such factors as the Board deems relevant, including, among other things, the Company's ability to generate positive cash flow from operations.

Set forth below is a line graph comparing the annual percentage change in the cumulative total shareholder return on the Company's common stock, based on the market price of the Company's common stock, with the total return on companies within the Nasdaq Composite Index and the Research Data Group, Inc. Nasdaq Lab Apparatus & Analytical, Optical, Measuring & Controlling Instrument (SIC 3820-3829 US Companies) Index (the "Nasdaq Lab Apparatus Index"). The performance graph assumes an investment of \$100 in each of the Company and the two indices, and the reinvestment of any dividends. The historical information set forth below is not necessarily indicative of future performance. Data for the Nasdaq Composite Index and the Nasdaq Lab Apparatus Index was provided to the Company by Research Data Group, Inc.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*



*\$100 invested on 12/31/2018 in stock or index, including reinvestment of dividends. Fiscal year ended December 31.

	12/18	12/19	12/20	12/21	12/22	12/23
Cognex Corporation	100.00	145.56	220.61	214.32	130.52	116.38
NASDAQ Composite	100.00	136.69	198.10	242.03	163.28	236.17
NASDAQ Stocks	100.00	140.44	190.18	225.09	144.46	172.72
<i>(SIC 3820-3829 U.S. Companies) Lab Apparatus & Analyt,Opt, Measuring, and Controlling Instrument)</i>						

ITEM 6: [RESERVED]

ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FORWARD-LOOKING STATEMENTS

Certain statements made in this report, as well as oral statements made by the Company from time to time, constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. Readers can identify these forward-looking statements by our use of the words "expects," "anticipates," "estimates," "potential," "believes," "projects," "intends," "plans," "will," "may," "shall," "could," "should," "opportunity," "goal" and similar words and other statements of a similar sense. These statements are based on our current estimates and expectations as to prospective events and circumstances, which may or may not be in our control and as to which there can be no firm assurances given. These forward-looking statements, which include statements regarding business and market growth opportunities and trends, future financial performance and financial targets, customer demand and order rates and timing of related revenue, managing supply shortages, delivery lead times, future product mix, research and development activities, sales and marketing activities (including our Emerging Customer Program), new product offerings and product development activities, customer acceptance of our products, the potential effects of emerging technologies, capital expenditures, cost management activities, investments, liquidity, dividends and stock repurchases, strategic and growth plans, our ability to maintain and grow key relationships, acquisitions, the expected impact of the fire at our primary contract manufacturer's plant on our assets, business and results of operations and related insurance recoveries, and estimated tax benefits and expenses and other tax matters, involve known and unknown risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include: (1) the technological obsolescence of current products and the inability to develop new products; (2) the impact of competitive pressures; (3) the inability to attract and retain skilled employees and maintain our unique corporate culture; (4) the failure to properly manage the distribution of products and services; (5) economic, political, and other risks associated with international sales and operations, including the impact of trade disputes on the economic climate in China and the wars in Ukraine and Israel; (6) the challenges in integrating and achieving expected results from acquired businesses; (7) information security breaches; (8) the failure to comply with laws or regulations relating to data privacy or data protection; (9) the inability to protect our proprietary technology and intellectual property; (10) the failure to manufacture and deliver products in a timely manner; (11) the inability to obtain, or the delay in obtaining, components for our products at reasonable prices; (12) the failure to effectively manage product transitions or accurately forecast customer demand; (13) the inability to manage disruptions to our distribution centers or to our key suppliers; (14) the inability to design and manufacture high-quality products; (15) the loss of, or curtailment of purchases by, large customers in the logistics, consumer electronics, or automotive industries; (16) potential impairment charges with respect to our investments or acquired intangible assets; (17) exposure to additional tax liabilities, increases and fluctuations in our effective tax rate, and other tax matters; (18) fluctuations in foreign currency exchange rates and the use of derivative instruments; (19) unfavorable global economic conditions, including increases in interest rates and high inflation rates; (20) business disruptions from natural or man-made disasters, such as fire, or public health issues; (21) exposure to potential liabilities, increased costs, reputational harm, and other adverse effects associated with expectations relating to environmental, social, and governance considerations; (22) stock price volatility; and (23) our involvement in time-consuming and costly litigation or activist shareholder activities. The foregoing list should not be construed as exhaustive and we encourage readers to refer to the detailed discussion of risk factors included in Part I - Item 1A of this Annual Report on Form 10-K. The Company cautions readers not to place undue reliance upon any such forward-looking statements, which speak only as of the date made. The Company disclaims any obligation to subsequently revise forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date such statements are made.

EXECUTIVE OVERVIEW

Cognex Corporation ("the Company") invents and commercializes technologies that address some of the most critical manufacturing and distribution challenges. We are a leading global provider of machine vision products and solutions that seek to improve efficiency and quality in a wide range of businesses across attractive industrial end markets. In addition to product revenue derived from the sale of machine vision products, the Company also generates revenue by providing maintenance and support, consulting, and training services to its customers; however, service revenue accounted for less than 10% of total revenue for all periods presented.

Machine vision is used in a variety of industries where technology is widely recognized as an important component of automated production, distribution, and quality assurance. Virtually every manufacturer or distributor can achieve better quality and efficiency by using machine vision. This results in a broad base of potential customers across a variety of industries, including automotive, logistics, consumer electronics, medical-related, semiconductor, consumer products, and food and beverage.

Revenue for the year ended December 31, 2023 totaled \$837,547,000, representing a decrease of 17% from the prior year due primarily to lower spending trends across our factory automation business, most notably in the consumer electronics and semiconductor industries, and the continued pause in investments by a few large e-commerce logistics customers.

Gross margin as a percentage of revenue remained consistent with the prior year at 72%, as the deleveraging impact of lower sales volume, less favorable revenue mix, and charges related to the acquisition of Moritex Corporation in the fourth quarter of 2023 were offset by lower inventory costs due to a reduction in premiums paid to brokers for the purchase of components.

Operating expenses were relatively flat with the prior year, as the favorable year-over-year impact of losses from the fire at our contract manufacturer in 2022 compared to recoveries from the fire in 2023, lower incentive compensation, and cost management activities were offset by investments in our “Emerging Customer” sales initiative and costs related to the acquisition of Moritex Corporation in the fourth quarter of 2023.

Operating income decreased to 16% of revenue in 2023 compared to 24% of revenue in 2022 driven by the operating deleveraging resulting from the lower revenue levels. This lower level of operating income resulted in net income of 14% of revenue in 2023 compared to 21% of revenue in 2022, and net income per diluted share of \$0.65 in 2023 compared to \$1.23 in 2022.

The following table sets forth certain consolidated financial data as a percentage of revenue:

	Year Ended December 31,		
	2023 (1)	2022 (1)	2021
Revenue	100 %	100 %	100 %
Cost of revenue	28	28	27
Gross margin	72	72	73
Research, development, and engineering expenses	17	14	13
Selling, general, and administrative expenses	40	31	30
Loss (recovery) from fire	(1)	2	—
Operating income	16	24	30
Non-operating income	1	—	1
Income before income tax expense	16	25	31
Income tax expense	3	3	4
Net income	14 %	21 %	27 %

(1) Amounts may not total properly due to rounding.

RESULTS OF OPERATIONS

As foreign currency exchange rates are a factor in understanding period-to-period comparisons, we believe the presentation of results on a constant-currency basis in addition to reported results helps improve investors' ability to understand our operating results and evaluate our performance in comparison to prior periods. We also use results on a constant-currency basis as one measure to evaluate our performance. Constant-currency information compares results between periods as if exchange rates had remained constant period-over-period. We generally refer to such amounts calculated on a constant-currency basis as excluding the impact of foreign currency exchange rate changes. Results on a constant-currency basis are not in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and should be considered in addition to, and not as a substitute for, results prepared in accordance with U.S. GAAP.

Year Ended December 31, 2023 Compared to Year Ended December 31, 2022

Revenue

Revenue for the year ended December 31, 2023 was \$837,547,000 compared to \$1,006,090,000 for the prior year, representing a decrease of 17%. Changes in foreign exchange rates resulted in a lower level of reported revenue in 2023 as compared to 2022. Excluding the impact of foreign currency exchange rate changes, revenue decreased

by 16% compared to 2022. On October 18, 2023, Cognex acquired Moritex Corporation, a global provider of premium optical components based in Japan. During the integration period, Cognex is consolidating Moritex results one month in arrears, and therefore, revenue for the fourth quarter of 2023 included six weeks of Moritex revenue totaling approximately \$7,000,000. The majority of this revenue was from customers based in Asia in similar industries as Cognex's historical revenue.

The decrease in revenue was due primarily to lower spending trends across our factory automation business, most notably in the consumer electronics and semiconductor industries, and the continued pause in investments by a few large e-commerce logistics customers. Revenue from the automotive industry, our largest market in both 2023 and 2022, decreased approximately 6% from the prior year. Although automotive revenue related to investment in electric vehicle battery applications grew year-over-year, this increase was more than offset by lower automotive revenue outside of electric vehicle battery applications. Revenue from the logistics industry decreased approximately 21% from the prior year. Excluding the decreases in revenue from a few large e-commerce customers, revenue from the remainder of the logistics industry grew, as the broader base of logistics customers continued to invest in automation. Revenue from the consumer electronics industry decreased approximately 31% from the prior year, with a large portion of the decrease coming from lower large-customer demand.

The following table sets forth our disaggregated revenue information by geographic area based on the customers' country of domicile (in thousands) for the years ended December 31, 2023 and 2022.

	Twelve-months Ended			
	December 31, 2023	December 31, 2022	\$ Change	% Change
Americas	\$ 330,415	\$ 390,573	\$ (60,158)	(15)%
<i>Percentage of total revenue</i>	39 %	39 %		
Europe	\$ 220,665	\$ 234,643	\$ (13,978)	(6)%
<i>Percentage of total revenue</i>	26 %	23 %		
Greater China	\$ 164,115	\$ 227,447	\$ (63,332)	(28)%
<i>Percentage of total revenue</i>	20 %	23 %		
Other Asia	\$ 122,352	\$ 153,427	\$ (31,075)	(20)%
<i>Percentage of total revenue</i>	15 %	15 %		
Total revenue	\$ 837,547	\$ 1,006,090	\$ (168,543)	(17)%

Changes in revenue from a geographic perspective were as follows:

- Revenue from customers based in the Americas decreased by 15% from the prior year driven by lower revenue in the logistics industry due to the continued pause in investments by a few large e-commerce customers. Revenue from industries outside of logistics also declined from the prior year, most notably in medical-related industries that had benefited from COVID-related applications in prior years.
- Revenue from customers based in Europe decreased by 6% from the prior year. Changes in foreign currency exchange rates resulted in a higher level of reported revenue in 2023, as the U.S. Dollar weakened versus the Euro and sales denominated in Euros were translated into U.S. Dollars at a higher rate. Excluding the impact of foreign currency exchange rate changes, revenue from customers based in Europe decreased by 8% from the prior year. The decrease came from customers in a variety of industries, most notably the logistics and consumer electronics industries.
- Revenue from customers based in Greater China decreased by 28% from the prior year. Changes in foreign currency exchange rates resulted in a lower level of reported revenue in 2023, due to the impact of sales denominated in Chinese Renminbi. Excluding the impact of foreign currency exchange rate changes, revenue from customers based in Greater China decreased by 23% from the prior year. The decrease was driven by lower revenue in the consumer electronics industry, particularly due to lower large-customer demand. Challenging business conditions in China also resulted in broad-based declines in revenue from customers in a variety of industries, most notably the automotive and semiconductor industries.
- Revenue from other countries in Asia decreased by 20% from the prior year. Changes in foreign currency exchange rates resulted in a lower level of reported revenue in 2023, primarily from sales denominated in Japanese Yen and Korean Won. Excluding the impact of foreign currency exchange rate changes, revenue from other countries in Asia decreased by 17% from the prior year. The decrease was driven by lower

revenue in the semiconductor and consumer electronics industries, and, to a lesser extent, the automotive industry. Revenue from Moritex customers based in Japan in the fourth quarter of 2023 was not material to the overall trend in the other countries in Asia region that includes Japan.

Gross Margin

The following table sets forth our gross margin (in thousands) for the years ended December 31, 2023 and 2022.

	Twelve-months Ended			
	December 31, 2023	December 31, 2022	\$ Change	% Change
Gross margin	\$ 601,241	\$ 721,905	\$ (120,664)	(17)%
<i>Percentage of total revenue</i>	72 %	72 %		

Gross margin as a percentage of revenue remained consistent at 72% in both 2023 and 2022. The deleveraging impact of lower sales volume, as well as less favorable revenue mix and charges related to the acquisition of Moritex Corporation in the fourth quarter of 2023, had an unfavorable impact on the gross margin percentage as compared to the prior year.

In accordance with the accounting principles applied in business combinations, the Company recorded Moritex inventories at fair market value, resulting in a \$4,000,000 increase to acquired inventories above cost. Of this \$4,000,000 increase to inventories, approximately \$2,800,000 was recorded as cost of revenue in the fourth quarter as the majority of the acquired inventories were sold, with the remaining \$1,200,000 expected to be recorded as cost of revenue in the first quarter of 2024. Moritex charges for the fourth quarter of 2023 also included approximately \$600,000 of amortization related to acquired technologies.

These decreases were offset by lower inventory costs driven by a reduction in premiums paid to brokers for the purchase of components in response to global supply chain constraints and the expedited replenishment of inventories lost in the fire at our primary contract manufacturer in the second quarter of 2022.

Operating Expenses

The following table sets forth our operating expenses (in thousands) for the years ended December 31, 2023 and 2022.

	Twelve-months Ended			
	December 31, 2023	December 31, 2022	\$ Change	% Change
Research, development, and engineering expenses	\$ 139,400	\$ 141,133	\$ (1,733)	(1)%
<i>Percentage of total revenue</i>	17 %	14 %		
Selling, general, and administrative expenses	\$ 339,139	\$ 312,107	\$ 27,032	9 %
<i>Percentage of total revenue</i>	40 %	31 %		
Restructuring charges	\$ —	\$ 1,657	\$ (1,657)	(100)%
<i>Percentage of total revenue</i>	— %	— %		
Loss (recovery) from fire	\$ (8,000)	\$ 20,779	\$ (28,779)	(139)%
<i>Percentage of total revenue</i>	(1)%	2 %		
Total operating expenses	\$ 470,539	\$ 475,676	\$ (5,137)	(1)%
<i>Percentage of total revenue</i>	56 %	47 %		

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses in 2023 decreased by \$1,733,000, or 1%, from the prior year. The decrease in RD&E expenses was due primarily to lower incentive compensation expenses resulting from weaker business performance, as well as cost management activities that included the realignment of headcount to the lower business levels. These decreases were partially offset by the additional costs associated with a new team of optical engineers that joined Cognex with the acquisition of Moritex Corporation on October 18, 2023.

RD&E expenses as a percentage of revenue was 17% in 2023 compared to 14% in 2022. We believe that a continued commitment to RD&E activities is essential to maintain or achieve product leadership with our existing products and to provide innovative new product offerings, as well as to provide engineering support for large

customers. In addition, we consider our ability to accelerate the time to market for new products to be critical to our revenue growth and competitive position. This annual percentage is impacted by revenue levels and investing cycles.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses in 2023 increased by \$27,032,000, or 9%, from the prior year. The increase in SG&A expenses was due primarily to increased costs related to our “Emerging Customer” sales initiative, including additional headcount, travel expenses, sales demonstration equipment, and marketing costs. We launched this initiative in 2023 to broaden the reach of our sales force to customers who are relatively new to factory automation and have not fully realized the advantages of machine vision.

Costs related to the acquisition of Moritex Corporation on October 18, 2023 also contributed to the higher SG&A expenses. These costs included additional sales and support personnel, sales demonstration equipment distributed to the Cognex sales force, transaction costs totaling approximately \$5,800,000, and approximately \$800,000 of amortization related to acquired customer relationships and trademarks.

These increases were partially offset by lower incentive compensation expenses, which included sales commissions and incentive bonuses, resulting from weaker business performance. Cost management also helped to offset the increases, including the realignment of headcount to support the Emerging Customer sales initiative.

Loss (Recovery) from Fire

On June 7, 2022, the Company’s primary contract manufacturer experienced a fire at its plant in Indonesia. The fire destroyed a significant amount of Cognex-owned consigned inventories, as well as component inventories owned by the contract manufacturer that were designated for Cognex products. There was no significant damage to the Company’s production equipment. Since the date of the fire, the Company has worked with the contract manufacturer to resume production, maintain standards of product quality, and replenish inventories destroyed by the fire. Since 2022, the Company has also been scaling up an additional contract manufacturer to further mitigate risk, diversify supply chain, and expand production capacity.

In 2022, the Company recorded a net loss related to the fire of \$20,779,000, consisting primarily of losses of inventories and other assets of \$48,339,000, partially offset by insurance proceeds received from the Company’s insurance carrier of \$27,560,000. In 2023, the Company recorded recoveries related to the fire of \$8,000,000, consisting of \$2,500,000 for proceeds received from the Company’s insurance carrier in relation to a business interruption claim and \$5,500,000 for proceeds received as part of a financial settlement for lost inventory and other losses incurred as a result of the fire. Management does not anticipate additional recoveries.

Restructuring Charges

On December 7, 2022, the Company acquired SAC Sirius Advanced Cybernetics GmbH (“SAC”), a leader in computational lighting technology based in Germany. In December 2022, following its acquisition of SAC, the Company performed restructuring activities to align the cost and operating structure of the acquired business with the Company’s business strategy. The restructuring activities resulted in charges of \$1,657,000 in 2022. No additional charges are expected to be incurred in future periods in relation to this restructuring plan.

Non-operating Income (Expense)

The following table sets forth our non-operating income (expense) (in thousands) for the years ended December 31, 2023 and 2022.

	Twelve-months Ended			
	December 31, 2023	December 31, 2022	\$ Change	% Change
Foreign currency gain (loss)	\$ (10,039)	\$ (1,837)	\$ (8,202)	446 %
Investment income	\$ 14,093	\$ 6,715	\$ 7,378	110 %
Other income (expense)	\$ 592	\$ (412)	\$ 1,004	(244)%
Total non-operating income (expense)	\$ 4,646	\$ 4,466	\$ 180	4 %

The Company recorded foreign currency losses of \$10,039,000 in 2023 and \$1,837,000 in 2022. In the third quarter of 2023, the Company recorded a foreign currency loss of \$8,456,000 on the settlement of a foreign currency forward contract entered into to hedge the Japanese Yen purchase price of the acquisition of Moritex Corporation. Remaining foreign currency gains and losses in each year resulted primarily from the revaluation and settlement of assets and liabilities that are denominated in currencies other than the functional currency of the Company, which is the U.S. Dollar, or its subsidiaries.

Investment income increased by \$7,378,000, or 110%, from the prior year. The increase was due primarily to higher yields on the Company's portfolio of debt securities, partially offset by lower average investment balances and changes in realized gains and losses. During the fourth quarter of 2023, net cash payments related to the acquisition of Moritex Corporation reduced cash available to invest by approximately \$257 million, which resulted in lower investment income for the fourth quarter of 2023.

The Company recorded other income of \$592,000 in 2023 and other expense of \$412,000 in 2022.

Income Tax Expense

The following table sets forth income tax information (in thousands) for the twelve-month periods ended December 31, 2023 and December 31, 2022.

	Twelve-months Ended			
	December 31, 2023	December 31, 2022	\$ Change	% Change
Income before income tax expense	\$ 135,348	\$ 250,695	\$ (115,347)	(46)%
Income tax expense	\$ 22,114	\$ 35,170	\$ (13,056)	(37)%
Effective income tax rate	16 %	14 %		

The Company's effective tax rate was 16% in 2023 and 14% in 2022.

The increase in the effective tax rate from 14% to 16% primarily resulted from the impact of discrete tax items, most notably an increase in tax reserves and an increase in tax expense due to a tax rate revaluation on state tax assets. These impacts were partially offset by discrete tax benefits related to the release of a valuation allowance.

Excluding the impact of all discrete tax items, the Company's effective tax rate was 15% in 2023 and 16% in 2022 due to an increase in tax credits available in the year, partially offset by an increase in disallowed executive compensation.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenue

Revenue for the year ended December 31, 2022 was \$1,006,090,000 compared to \$1,037,098,000 for the prior year, representing a decrease of 3%. Changes in foreign exchange rates resulted in a lower level of reported revenue in 2022 as compared to 2021. Excluding the impact of foreign currency exchange rate changes, revenue increased by 1% compared to 2021.

The fire on June 7, 2022 at our primary contract manufacturer's plant in Indonesia, which destroyed a large amount of component inventory, limited our ability to fulfill certain orders in the year ended December 31, 2022, which resulted in lower revenue. Revenue from the logistics industry, our largest market in 2021, decreased by approximately 25% as a result of the slowing of large e-commerce customer projects as such customers absorbed excess capacity built up during the pandemic. Excluding these decreases in revenue from a few large logistics customers, revenue from the remainder of the logistics industry grew, as the broader base of logistics customers continued to invest in automation. The decline in overall revenue from the logistics industry was partially offset by growth in the broader factory automation market, most notably in the consumer electronics, automotive, and semiconductor industries. Consumer electronics revenue increased by approximately 8%, and 14% on a constant-currency basis, primarily as a result of increased large-customer demand. Revenue from our largest industry in 2022, automotive, increased by 7%, and 13% on a constant-currency basis, primarily as a result of continued investment in electric vehicles.

Changes in revenue from a geographic perspective were as follows:

- Revenue from customers based in the Americas decreased by 10% from the prior year driven primarily by a decrease in revenue from customers in the logistics industry. This decrease was partially offset by an increase in revenue from other industries, led by growth in the automotive and consumer electronics industries.
- Revenue from customers based in Europe decreased by 5% from the prior year. Changes in foreign currency exchange rates resulted in a lower level of reported revenue in 2022, as sales denominated in Euros were translated into U.S. Dollars at a lower rate. Excluding the impact of foreign currency exchange rate changes, revenue from customers based in Europe increased by 5% from the prior year. The increase came from customers in a variety of industries, most notably the automotive and consumer electronics industries, partially offset by a decrease in revenue from customers in the logistics industry.

- Revenue from customers based in Greater China increased by 14% from the prior year. Changes in foreign currency exchange rates resulted in a lower level of reported revenue in 2022, primarily from sales denominated in Chinese Renminbi. Excluding the impact of foreign currency exchange rate changes, revenue from customers based in Greater China increased by 17% from the prior year. The increase was driven primarily by higher revenue in the consumer electronics industry, particularly due to increased large-customer demand, and to a lesser extent, growth in the semiconductor and automotive industries.
- Revenue from other countries in Asia remained flat with the prior year. Changes in foreign currency exchange rates resulted in a lower level of reported revenue in 2022, primarily from sales denominated in Japanese Yen and Korean Won. Excluding the impact of foreign currency exchange rate changes, revenue from these customers in other countries in Asia increased by 8% from the prior year, led by higher revenue in semiconductor and automotive industries, and, to a lesser extent, the logistics industry. These increases were partially offset by a decrease in revenue from the consumer electronic industry.

Gross Margin

Gross margin as a percentage of revenue decreased to 72% in 2022 compared to 73% in 2021. The decrease resulted primarily from higher inventory costs, due largely to global supply chain constraints and the expedited replenishment of inventories lost in the fire at our primary contract manufacturer's plant on June 7, 2022. These circumstances have resulted in broker-buy purchases for components at higher-than-normal costs. The decrease in gross margin was also due to an unfavorable impact of foreign currency exchange rate changes.

A more favorable revenue mix partially offset this decrease in gross margin. A lesser percentage of revenue came from the logistics industry, which has relatively lower gross margins, and a greater percentage of revenue came from the consumer electronics industry, which has relatively higher gross margins. Further, the Company has increased prices, which has offset the impact of component cost inflation (not including broker-buy purchases) on our gross margin.

Operating Expenses

Research, Development, and Engineering Expenses

Research, development, and engineering (RD&E) expenses in 2022 increased by \$5,761,000, or 4%, from the prior year as detailed in the table below (in thousands).

RD&E expenses in 2021	\$	135,372
Personnel-related costs		8,060
Stock-based compensation		4,761
Foreign currency exchange rate changes		(6,348)
Incentive compensation		(4,453)
Other		3,741
RD&E expenses in 2022	\$	141,133

RD&E expenses increased primarily due to higher personnel-related costs resulting from headcount additions to support new product initiatives and salary increases provided to employees as part of our merit and promotion process. Stock-based compensation expense also increased from the prior year due to a higher level of stock-based grants at a higher average economic value, as well as the impact of a forfeiture rate true-up that resulted in higher expense.

These increases were partially offset by lower incentive compensation expense compared to the prior year due to weaker business performance. Relevant performance goals for incentive compensation plans are set at the beginning of each year, with the ability to earn upside if the goals are exceeded. In contrast to 2022, performance goals set for 2021 incentive bonuses were exceeded, resulting in a higher level of bonus expense recorded in 2021. The impact of foreign currency exchange rate changes further offset the increase to RD&E expenses, as costs denominated in foreign currencies were translated into U.S. Dollars at a lower rate.

RD&E expenses as a percentage of revenue was 14% in 2022 compared to 13% in 2021.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses increased in 2022 by \$2,753,000, or 1%, from the prior year as detailed in the table below (in thousands).

SG&A expenses in 2021	\$	309,354
Personnel-related costs		24,112
Stock-based compensation		6,436
Travel expenses		5,666
Incentive compensation		(24,476)
Foreign currency exchange rate changes		(14,613)
Other		5,628
SG&A expenses in 2022	\$	312,107

SG&A expenses increased primarily due to higher personnel-related costs resulting from headcount additions, primarily for sales personnel to support the Company's anticipated revenue growth, and salary increases provided to employees as part of our merit and promotion process. In addition to salaries and fringe benefits, these personnel-related costs included sales commissions and travel expenses related to the additional headcount. Stock-based compensation expense also increased from the prior year due to a higher level of stock-based grants at a higher average economic value, as well as the impact of a forfeiture rate true-up that resulted in higher expense. While travel expenses increased due to the number of sales personnel added, expenses also increased due to a higher level of travel activity as restrictions related to COVID-19 continued to ease.

These increases were partially offset by lower incentive compensation expenses than the prior year, which included sales commissions and incentive bonuses, primarily due to weaker business performance. Relevant performance goals for these plans are set at the beginning of each year, with the ability to earn upside if the goals are exceeded. In contrast to 2022, performance goals set for 2021 sales commissions and incentive bonuses were exceeded, resulting in a higher level of incentive compensation expenses recorded in 2021. The impact of foreign currency exchange rate changes further offset the increase to SG&A expenses, as costs denominated in foreign currencies were translated into U.S. Dollars at a lower rate.

Loss from Fire

On June 7, 2022, the Company's primary contract manufacturer experienced a fire at its plant in Indonesia. The fire destroyed a significant amount of Cognex-owned consigned inventories, as well as component inventories owned by the contract manufacturer that were designated for Cognex products. There was no significant damage to the Company's production equipment. Since the date of the fire, the Company has worked with the contract manufacturer to assess the damage, resume production, maintain standards of product quality, and replenish inventories destroyed by the fire. The Company has also been scaling up an additional contract manufacturer to further mitigate risk, diversify supply chain, and expand production capacity.

As a result of the fire, the Company recorded \$48,339,000 in gross losses in 2022, related to \$37,663,000 of Cognex-owned inventories, \$8,709,000 of primarily prepayments related to Cognex-designated components that were owned by the contract manufacturer and other assets, and \$1,967,000 related to deleveraging of costs related to our distribution centers.

Gross losses have been reduced by insurance proceeds received from the Company's insurance carrier of \$27,560,000 in the fourth quarter of 2022. Gross losses net of insurance recovery of \$20,779,000 are presented in the caption "Loss from fire" on the Consolidated Statements of Operations.

Restructuring Charges

On December 7, 2022, the Company acquired all of the outstanding shares of SAC Sirius Advanced Cybernetics GmbH ("SAC"), a leader in computational lighting technology based in Germany. The acquisition of SAC and its technology is expected to expand the Company's capabilities in defect detection, and accelerate our growth trajectory with electric vehicle battery manufacturers. In December 2022, following its acquisition of SAC, the Company performed restructuring activities to align the cost and operating structure of the acquired business with the Company's business strategy. The restructuring activities resulted in charges of \$1,657,000 in 2022.

Non-operating Income (Expense)

The Company recorded foreign currency losses of \$1,837,000 in 2022 and \$2,270,000 in 2021. Foreign currency gains and losses result primarily from the revaluation and settlement of assets and liabilities that are denominated in currencies other than the functional currencies of our subsidiaries or the reporting currency of our company, which is the U.S. Dollar.

Investment income increased by \$55,000, or 1%, from the prior year. The slight increase was due primarily to higher yields on investments, partially offset by lower average investment balances and changes in realized gains and losses.

The Company recorded other expense of \$412,000 in 2022 and \$591,000 in 2021.

Income Tax Expense

The Company's effective tax rate was 14% of pre-tax income in 2022, compared to 12% in 2021.

The increase in effective tax rate in 2022 primarily resulted from the impact of discrete tax items, including a decrease in tax benefits related to stock-based compensation, an increase in certain international tax reserves, and a net expense related to return-to-provision adjustments. These impacts were partially offset by discrete tax benefits related to audit settlements, a release in the valuation allowance, Global Intangible Low-Taxed Income ("GILTI") adjustments, and a rate revaluation on deferred state tax assets.

Excluding the impact of all discrete tax items, the Company's effective tax rate was 16% of pre-tax income for both 2022 and 2021.

LIQUIDITY AND CAPITAL RESOURCES

The Company has historically been able to generate positive cash flow from operations, which has funded its operating activities and other cash requirements and resulted in an accumulated cash and investment balance of \$576,277,000 as of December 31, 2023. The Company has established guidelines relative to credit ratings, diversification, and maturities of its investments to maintain liquidity and safety of the investment portfolio.

Operating Activities

Net cash provided by operating activities totaled \$112,916,000 in 2023. Significant uses of cash consisted of aggregate payments of \$24,040,000 related to the 2019 acquisition of Sualab Co, Ltd. that were contingent upon the continued employment of key talent, payments made to build up inventory levels, and incentive compensation payments made in the first quarter of 2023 that were earned and accrued in 2022.

Investing Activities

Net cash provided by investing activities totaled \$32,273,000 in 2023. Investing activities included the acquisition of Moritex Corporation in the fourth quarter of 2023 that resulted in a payment, net of cash acquired, of \$257,056,000 that was largely funded from the maturities and sales of investments. Investing activities also included capital expenditures, which totaled \$23,077,000 in 2023 and consisted primarily of continued investments in business systems related to the Company's sales process, manufacturing test equipment related to new product introductions, and leasehold improvements.

Financing Activities

Net cash used in financing activities totaled \$125,605,000 in 2023.

In October 2018, the Company's Board of Directors authorized the repurchase of \$200,000,000 of the Company's common stock. Under this October 2018 program, in addition to repurchases made in prior years, the Company repurchased 957,000 shares at a cost of \$78,652,000 in 2021, which completed purchases under the October 2018 program.

In March 2020, the Company's Board of Directors authorized the repurchase of an additional \$200,000,000 of the Company's common stock. Under this March 2020 program, the Company repurchased 1,060,000 shares, including 5,000 shares that were repurchased in 2021 and settled in 2022, at a cost of \$83,000,000 in 2021, and 1,677,000 shares at a cost of \$117,000,000 in 2022, which completed purchases under the March 2020 program.

In March 2022, the Company's Board of Directors authorized the repurchase of an additional \$500,000,000 of the Company's common stock. Under this March 2022 program, the Company repurchased 1,682,000 shares at a cost of \$87,314,000 in 2022 and 1,723,000 shares at a cost of \$79,794,000 in 2023, including \$446,000 of buyback Excise Tax in accordance with the Inflation Reduction Act of 2022, leaving a remaining balance of \$332,892,000.

The Company may repurchase shares under this program in future periods depending on a variety of factors, including, among other things, the impact of dilution from employee stock awards, stock price, share availability, and cash requirements.

The Company's Board of Directors declared and paid cash dividends of \$0.060 per share in the first, second, and third quarters of 2021, \$0.065 per share in the fourth quarter of 2021 and in the first, second, and third quarters of 2022, and \$0.070 per share in the fourth quarter of 2022 and in the first, second, and third quarters of 2023. The dividend was increased to \$0.075 per share in the fourth quarter of 2023.

Total dividends paid were \$49,079,000 in 2023, \$45,921,000 in 2022, and \$43,263,000 in 2021. Future dividends will be declared at the discretion of the Company's Board of Directors and will depend on such factors as the Board deems relevant, including, among other things, the Company's ability to generate positive cash flow from operations.

Future Cash Requirements

The Company's material cash requirements include contractual obligations related to inventory purchase commitments and leases. As of December 31, 2023, the Company had inventory purchase commitments of \$61,459,000, with the majority payable within twelve months, and lease payment obligations of \$105,697,000, with \$13,612,000 payable within twelve months.

Other significant and/or expected cash outlays for 2024 include:

- We expect to continue to make significant cash outlays related to our Emerging Customer sales initiative as we continue to grow our sales force in order to reach customers who are new to machine vision or Cognex.
- The Tax Cuts and Jobs Act of 2017 subjected unrepatriated foreign earnings to a one-time transition tax. As of December 31, 2023, the Company had a remaining balance payable of \$33,006,000 through 2025.

We believe that the Company's existing cash and investment balances, together with cash flow from operations, will be sufficient to meet its operating, investing, and financing activities for the next twelve months. In addition, the Company has no long-term debt. We believe that our strong cash position has put us in a relatively good position with respect to anticipated longer-term liquidity needs.

CRITICAL ACCOUNTING ESTIMATES

Our discussion and analysis of the Company's financial condition and results of operations are based on the consolidated financial statements included in this Annual Report on Form 10-K, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and various other assumptions believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Changes in accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ from these estimates under different assumptions or circumstances resulting in charges that could be material in future reporting periods. We believe the following critical accounting policies require the use of significant estimates and judgments in the preparation of our consolidated financial statements.

Revenue Recognition

The Company recognizes revenue in a manner that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Management uses significant judgment when determining the amount of revenue to be recognized each period for application-specific customer solutions. Accounting for application-specific customer solutions requires management to monitor and evaluate customer contracts to determine the point in time at which the solution is validated. The Company's application-specific customer solutions are comprised of a combination of products and services which are accounted for as one performance obligation to deliver a total solution to the customer.

Revenue for application-specific customer solutions is recognized at the point in time when the solution is validated, which is the point in time when the Company can objectively determine that the agreed-upon specifications in the contract have been met and the customer should reasonably accept the performance obligations in the arrangement. Although the customer may have taken legal title and physical possession of the goods when they arrived at the customer's designated site, the significant risks and rewards of ownership transfer to the customer only upon validation.

In certain instances, an arrangement may include customer-specified acceptance provisions or performance guarantees that allow the customer to accept or reject delivered products that do not meet the customer's requirements. If the Company can objectively determine that control of a good or service has been transferred to the customer in accordance with the agreed-upon requirements in the contract, then customer acceptance is a formality. If acceptance provisions are presumed to be substantive, then revenue is deferred until customer acceptance.

Income Taxes

Significant judgment is required in determining worldwide income tax expense based on tax laws in the various jurisdictions in which the Company operates. The Company has established reserves for income taxes by applying the “more likely than not” criteria, under which the recognition threshold is met when an entity concludes that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination by the relevant tax authority. All tax positions are analyzed periodically and adjustments are made as events occur that warrant modification, such as the completion of audits or the expiration of statutes of limitations, which may result in future charges or credits to income tax expense.

As part of the process of preparing consolidated financial statements, management is required to estimate income taxes in each of the jurisdictions in which the Company operates. These estimates occur in the calculation of income tax credits, benefits, and deductions, and in the calculation of certain tax assets and liabilities, which arise from differences in the timing of the recognition of certain expenses for tax and financial statement purposes. We assess the likelihood of the realization of deferred tax assets and record a corresponding valuation allowance as necessary if we determine those deferred tax assets may not be realized due to the uncertainty of the timing and amount to be realized of certain federal, state, and international tax credit carryovers.

The Company has made an election to account for the impact of the Global Intangible Low-Taxed Income (GILTI) minimum tax in deferred taxes. Management has determined that this change is considered preferable, based on the conclusion that it appropriately matches the Company’s current and deferred income tax implications to its tax structure.

Business Combinations

Allocating the purchase price for a business combination requires the Company to identify and estimate the fair values of various assets acquired and liabilities assumed. Management is responsible for determining the appropriate valuation model and estimated fair values, and in doing so, considers a number of factors, including information provided by an outside valuation advisor. Management bases the fair value of assets, including identifiable intangible assets acquired and liabilities assumed, on detailed valuations that use information and assumptions provided by management, which consider management’s best estimates of inputs and assumptions that a market participant would use.

NEW PRONOUNCEMENTS

Refer to Part II, Item 8 - Note 2 within this Form 10-K, for a full description of recently issued accounting pronouncements including the expected dates of adoption and expected impact on the financial position and results of operations of the Company.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to certain risks relating to its ongoing business operations, including foreign currency exchange rate risk and interest rate risk. The Company currently mitigates certain foreign currency exchange rate risks with derivative instruments. The Company does not currently manage its interest rate risk with derivative instruments.

Foreign Currency Risk

The Company faces exposure to foreign currency exchange rate fluctuations, as a significant portion of its revenues, expenses, assets, and liabilities are denominated in currencies other than the functional currencies of the Company’s subsidiaries or the reporting currency of the Company, which is the U.S. Dollar. In certain instances, we utilize forward contracts to hedge against foreign currency fluctuations. These contracts are used to minimize foreign currency gains or losses, as the gains or losses on the derivative are intended to offset the losses or gains on the underlying exposure. We do not engage in foreign currency speculation.

The Company enters into economic hedges utilizing foreign currency forward contracts with maturities of up to three months to manage the exposure to fluctuations in foreign currency exchange rates arising primarily from foreign-denominated receivables and payables.

The Company had the following outstanding forward contracts as of December 31, 2023 and 2022 (in thousands):

Currency	December 31, 2023				December 31, 2022			
	Notional Value	USD Equivalent	High Rate	Low Rate	Notional Value	USD Equivalent	High Rate	Low Rate
<i>Derivatives Not Designated as Hedging Instruments:</i>								
Euro	40,000	\$ 44,302	0.9029	0.9029	60,000	\$ 64,174	0.9350	0.9350
Singapore Dollar	39,700	30,136	1.32	1.32	—	—	—	—
Mexican Peso	145,000	8,505	17.05	17.05	185,000	9,480	19.51	19.51
Chinese Renminbi	50,000	7,025	7.12	7.12	55,000	7,619	7.22	7.22
Hungarian Forint	2,240,000	6,466	346.45	346.45	1,590,000	4,238	375.19	375.19
British Pound	3,345	4,258	0.7855	0.7855	3,445	4,161	0.8279	0.8279
Japanese Yen	600,000	4,255	141.02	141.02	700,000	5,281	132.56	132.56
Canadian Dollar	1,470	1,112	1.32	1.32	1,730	1,278	1.35	1.35
Swiss Franc	—	—	0	0	1,120	1,218	0.92	0.92

A change in foreign currency exchange rates could materially impact the fair value of these contracts; however, if this occurred, the fair value of the underlying exposures hedged by the contracts would change by a similar amount. Accordingly, management does not believe that a material change in foreign currency exchange rates used in the fair value of our derivative instruments would materially impact operations or cash flows.

The success of our foreign currency risk management program depends on forecasts of transaction activity denominated in various currencies. To the extent that these forecasts are overstated or understated during periods of currency volatility, we could experience unanticipated foreign currency gains or losses that could have a material impact on our results of operations. Furthermore, our failure to identify new exposures and hedge them in an effective manner may result in material foreign currency gains or losses.

The Company's functional currency/reporting currency exchange rate exposures result from revenues and expenses that are denominated in currencies other than the U.S. Dollar. In addition to the U.S. Dollar, a significant portion of our revenues and expenses are denominated in the Euro and Chinese Renminbi, and to a lesser extent the Korean Won, Japanese Yen, Mexican Peso, and Indian Rupee. We estimate that approximately 52% of our sales in 2023 were invoiced in currencies other than the U.S. Dollar, and we expect sales denominated in foreign currencies to continue to represent a significant portion of our total revenue. While we also have expenses denominated in these same foreign currencies, the impact on revenues has historically been, and is expected to continue to be, greater than the offsetting impact on expenses. Therefore, in times when the U.S. Dollar strengthens in relation to these foreign currencies, we would expect to report a net decrease in operating income. Conversely, in times when the U.S. Dollar weakens in relation to these foreign currencies, we would expect to report a net increase in operating income. Thus, changes in the relative strength of the U.S. Dollar may have a material impact on our operating results.

Interest Rate Risk

The Company's investment portfolio of debt securities includes corporate bonds, treasury notes, asset-backed securities, and sovereign bonds. Debt securities with original maturities greater than three months are designated as available-for-sale and are reported at fair value. As of December 31, 2023, the fair value of the Company's portfolio of debt securities amounted to \$373,622,000, with amortized cost amounts totaling \$383,589,000, maturities that do not exceed seven years, and a yield to maturity of 2.3%. Differences between the fair value and principal amounts of the Company's portfolio of debt securities are primarily attributable to discounts and premiums arising at the acquisition date, as well as unrealized gains and losses as of the balance sheet date. Management currently intends to hold these securities to full value recovery at maturity.

In July 2023, the Company's investment policy was modified to reduce effective maturities of newly purchased securities to up to five years. As of December 31, 2023, the Company held investments with maturities in excess of the five-year limit that were approved as pre-existing exceptions to the new policy. As of December 31, 2023, 68% of the investment portfolio had effective maturity dates of less than three years. Given the relatively short maturities and investment-grade quality of the Company's portfolio of debt securities as of December 31, 2023, we do not expect a sharp rise in interest rates to have a material adverse effect on the fair value of these instruments. As a result, the Company does not currently hedge these interest rate exposures.

The following table presents the hypothetical change in the fair value of the Company's portfolio of debt securities arising from selected potential changes in interest rates (in thousands). This modeling technique measures the change in fair value that would result from a parallel shift in the yield curve plus or minus 50 and 100 basis points (BP) over a twelve-month time horizon.

Type of security	Valuation of securities given an interest rate decrease		No change in interest rates	Valuation of securities given an interest rate increase	
	(100 BP)	(50 BP)		50 BP	100 BP
Corporate bonds	\$ 314,317	\$ 311,567	\$ 308,816	\$ 306,066	\$ 303,316
Treasury notes	44,298	43,911	43,523	43,135	42,748
Asset-backed securities	19,658	19,486	19,314	19,142	18,970
Sovereign bonds	2,003	1,986	1,969	1,951	1,933
	\$ 380,276	\$ 376,950	\$ 373,622	\$ 370,294	\$ 366,967

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Cognex Corporation

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Cognex Corporation (a Massachusetts corporation) and subsidiaries (the “Company”) as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income, shareholders’ equity, and cash flows for each of the three years in the period ended December 31, 2023, and the related notes and financial statement schedule included under Item 15(a) (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2023, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”), and our report dated February 15, 2024 expressed an unqualified opinion.

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) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the 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 disclosures to which it relates.

Revenue Recognition – Application-Specific Customer Solutions

As described further in Notes 1 and 14 to the consolidated financial statements, the Company recognizes revenue from application-specific customer solutions. For these transactions, revenue is recognized at the point in time when the solution is validated, which is when the Company can objectively determine that the agreed-upon specifications in the contract have been met and the customer will accept the performance obligation in the contract. We identified revenue recognition related to application-specific customer solutions as a critical audit matter.

The principal considerations for our determination that revenue recognition related to application-specific customer solutions is a critical audit matter are that evaluating the performance obligations and determining the timing of validation and that the agreed-upon specifications in the contract have been met relies on the use of management judgments and requires a higher degree of auditor judgment in designing, executing and evaluating the results of audit procedures. Accounting for application-specific customer solutions requires the Company to monitor and evaluate customer contracts on an ongoing basis to determine the point in time at which the solution is validated, the agreed-upon specifications in the contract have been met and revenue can be recognized.

Our audit procedures related to the revenue recognition of application-specific customer solutions included the following, among others.

- We tested the design and operating effectiveness of internal controls related to the monitoring of application-specific customer solutions contracts, determination of validation and the timing of revenue recognition.
- We evaluated management's significant accounting policies related to these customer contracts, including the determination of the performance obligation, for appropriate revenue recognition based on key terms and provisions.
- For a sample of contracts, we inspected source documents, including the customer contract or purchase order, third-party shipping information, invoice, and evidence of validation or acceptance to evaluate the identification of performance obligations and timing of revenue recognition.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2007.

Boston, Massachusetts

February 15, 2024

COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2023	2022	2021
	(In thousands, except per share amounts)		
Revenue	\$ 837,547	\$ 1,006,090	\$ 1,037,098
Cost of revenue	236,306	284,185	277,271
Gross margin	601,241	721,905	759,827
Research, development, and engineering expenses	139,400	141,133	135,372
Selling, general, and administrative expenses	339,139	312,107	309,354
Loss (recovery) from fire (Note 22)	(8,000)	20,779	—
Restructuring charges (Note 23)	—	1,657	—
Operating income	130,702	246,229	315,101
Foreign currency gain (loss)	(10,039)	(1,837)	(2,270)
Investment income	14,093	6,715	6,660
Other income (expense)	592	(412)	(591)
Income before income tax expense	135,348	250,695	318,900
Income tax expense	22,114	35,170	39,019
Net income	\$ 113,234	\$ 215,525	\$ 279,881
Net Income per weighted-average common and common-equivalent share:			
Basic	\$ 0.66	\$ 1.24	\$ 1.59
Diluted	\$ 0.65	\$ 1.23	\$ 1.56
Weighted-average common and common-equivalent shares outstanding:			
Basic	172,249	173,407	176,463
Diluted	173,399	174,869	179,916
Cash dividends per common share	\$ 0.286	\$ 0.265	\$ 0.245

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

COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
	2023	2022	2021
	(In thousands)		
Net income	\$ 113,234	\$ 215,525	\$ 279,881
Other comprehensive income (loss), net of tax:			
Available-for-sale investments:			
Net unrealized gain (loss), net of tax of \$4,389, \$(5,943), and \$(2,206) in 2023, 2022, and 2021, respectively	10,507	(17,152)	(7,152)
Reclassification of net realized (gain) loss into current operations	1,954	182	(236)
Net change related to available-for-sale investments	12,461	(16,970)	(7,388)
Foreign currency translation adjustments:			
Foreign currency translation gain (loss)	11,500	(4,385)	(6,753)
Net change related to foreign currency translation adjustments	11,500	(4,385)	(6,753)
Other comprehensive income (loss), net of tax	23,961	(21,355)	(14,141)
Total comprehensive income	<u>\$ 137,195</u>	<u>\$ 194,170</u>	<u>\$ 265,740</u>

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

COGNEX CORPORATION – CONSOLIDATED BALANCE SHEETS

	December 31,	
	2023	2022
	(In thousands)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 202,655	\$ 181,374
Current investments, amortized cost of \$132,799 and \$223,545 in 2023 and 2022, respectively, allowance for credit losses of \$0 in 2023 and 2022	129,392	218,759
Accounts receivable, allowance for credit losses of \$583 and \$730 in 2023 and 2022, respectively	114,164	125,417
Unbilled revenue	2,402	2,179
Inventories	162,285	122,480
Prepaid expenses and other current assets	68,099	67,490
Total current assets	<u>678,997</u>	<u>717,699</u>
Non-current investments, amortized cost of \$250,790 and \$476,148 in 2023 and 2022, respectively, allowance for credit losses of \$0 in 2023 and 2022	244,230	454,117
Property, plant, and equipment, net	105,849	79,714
Operating lease assets	75,115	37,682
Goodwill	393,181	242,630
Intangible assets, net	112,952	12,414
Deferred income taxes	400,400	407,241
Other assets	7,088	6,643
Total assets	<u>\$ 2,017,812</u>	<u>\$ 1,958,140</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 21,454	\$ 27,103
Accrued expenses	72,374	93,235
Accrued income taxes	16,907	18,129
Deferred revenue and customer deposits	31,525	40,787
Operating lease liabilities	9,624	8,454
Total current liabilities	<u>151,884</u>	<u>187,708</u>
Non-current operating lease liabilities	68,977	31,298
Deferred income taxes	246,877	249,961
Reserve for income taxes	26,685	15,866
Non-current accrued income taxes	18,338	33,008
Other liabilities	299	1,905
Total liabilities	<u>513,060</u>	<u>519,746</u>
Commitments and contingencies (Note 11)		
Shareholders' equity:		
Preferred stock, \$0.01 par value - Authorized: 400 shares in 2023 and 2022, respectively, no shares issued and outstanding	—	—
Common stock, \$0.002 par value – Authorized: 300,000 shares in 2023 and 2022, respectively, issued and outstanding: 171,599 and 172,631 shares in 2023 and 2022, respectively	343	345
Additional paid-in capital	1,037,202	979,167
Retained earnings	512,543	528,179
Accumulated other comprehensive loss, net of tax	(45,336)	(69,297)
Total shareholders' equity	<u>1,504,752</u>	<u>1,438,394</u>
Total liabilities and shareholders' equity	<u>\$ 2,017,812</u>	<u>\$ 1,958,140</u>

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

COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2023	2022	2021
	(In thousands)		
Cash flows from operating activities:			
Net income	\$ 113,234	\$ 215,525	\$ 279,881
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock-based compensation expense	54,768	54,505	43,774
Depreciation of property, plant, and equipment	17,270	16,347	16,616
Loss (gain) on disposal of property, plant, and equipment	229	19	33
Amortization of intangible assets	4,610	3,274	3,667
Non-cash impact of charges related to fire (Note 22)	—	46,372	—
Excess and obsolete inventory charges	3,775	3,084	2,573
Fair value adjustment on acquired inventories (Note 21)	2,829	—	—
Amortization of discounts or premiums on investments	1,745	4,968	4,887
Realized (gain) loss on sale of investments	1,954	182	(236)
Change in deferred income taxes	(19,779)	(27,338)	(3,118)
Changes in operating assets and liabilities:			
Accounts receivable	23,346	3,454	(4,503)
Unbilled revenue	(255)	1,806	1,637
Inventories	(22,591)	(48,934)	(54,920)
Prepaid expenses and other current assets	2,469	(6,998)	(32,342)
Accounts payable	(13,744)	(17,277)	27,828
Accrued expenses	(35,309)	2,056	16,861
Accrued income taxes	(16,745)	(444)	(6,401)
Deferred revenue and customer deposits	(9,122)	4,886	14,417
Other	4,232	(12,081)	3,411
Net cash provided by operating activities	<u>112,916</u>	<u>243,406</u>	<u>314,065</u>
Cash flows from investing activities:			
Purchases of investments	(184,056)	(233,720)	(668,053)
Maturities and sales of investments	496,462	253,983	430,969
Purchases of property, plant, and equipment	(23,077)	(19,667)	(15,455)
Net payments related to business acquisitions	(257,056)	(5,050)	—
Net cash provided by (used in) investing activities	<u>32,273</u>	<u>(4,454)</u>	<u>(252,539)</u>
Cash flows from financing activities:			
Net payments from issuance of common stock under stock plans	3,268	9,861	63,292
Repurchase of common stock	(79,794)	(204,314)	(161,652)
Payment of dividends	(49,079)	(45,921)	(43,263)
Net cash used in financing activities	<u>(125,605)</u>	<u>(240,374)</u>	<u>(141,623)</u>
Effect of foreign exchange rate changes on cash and cash equivalents	1,697	(3,365)	(2,815)
Net change in cash and cash equivalents	<u>21,281</u>	<u>(4,787)</u>	<u>(82,912)</u>
Cash and cash equivalents at beginning of year	<u>181,374</u>	<u>186,161</u>	<u>269,073</u>
Cash and cash equivalents at end of year	<u>\$ 202,655</u>	<u>\$ 181,374</u>	<u>\$ 186,161</u>

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

COGNEX CORPORATION – CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands)	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
	Shares	Par Value				
Balance as of December 31, 2020	175,790	\$ 352	\$ 807,739	\$ 487,912	\$ (33,801)	\$ 1,262,202
Net issuance of common stock under stock plans	1,703	3	63,289	—	—	63,292
Repurchase of common stock	(2,012)	(4)	—	(161,648)	—	(161,652)
Stock-based compensation expense	—	—	43,774	—	—	43,774
Payment of dividends (\$0.245 per common share)	—	—	—	(43,263)	—	(43,263)
Net income	—	—	—	279,881	—	279,881
Net unrealized gain (loss) on available-for-sale investments, net of tax of (\$2,206)	—	—	—	—	(7,152)	(7,152)
Reclassification of net realized (gain) loss on the sale of available-for-sale investments	—	—	—	—	(236)	(236)
Foreign currency translation adjustment, net of tax of \$0	—	—	—	—	(6,753)	(6,753)
Balance as of December 31, 2021	175,481	\$ 351	\$ 914,802	\$ 562,882	\$ (47,942)	\$ 1,430,093
Net issuance of common stock under stock plans	514	1	9,860	—	—	9,861
Repurchase of common stock	(3,364)	(7)	—	(204,307)	—	(204,314)
Stock-based compensation expense	—	—	54,505	—	—	54,505
Payment of dividends (\$0.265 per common share)	—	—	—	(45,921)	—	(45,921)
Net income	—	—	—	215,525	—	215,525
Net unrealized gain (loss) on available-for-sale investments, net of tax of (\$5,943)	—	—	—	—	(17,152)	(17,152)
Reclassification of net realized (gain) loss on the sale of available-for-sale investments	—	—	—	—	182	182
Foreign currency translation adjustment, net of tax of \$0	—	—	—	—	(4,385)	(4,385)
Balance as of December 31, 2022	172,631	\$ 345	\$ 979,167	\$ 528,179	\$ (69,297)	\$ 1,438,394
Net issuance of common stock under stock plans	691	1	3,267	—	—	3,268
Repurchase of common stock	(1,723)	(3)	—	(79,791)	—	(79,794)
Stock-based compensation expense	—	—	54,768	—	—	54,768
Payment of dividends (\$0.286 per common share)	—	—	—	(49,079)	—	(49,079)
Net income	—	—	—	113,234	—	113,234
Net unrealized gain (loss) on available-for-sale investments, net of tax of \$4,389	—	—	—	—	10,507	10,507
Reclassification of net realized (gain) loss on the sale of available-for-sale investments	—	—	—	—	1,954	1,954
Foreign currency translation adjustment, net of tax of \$0	—	—	—	—	11,500	11,500
Balance as of December 31, 2023	171,599	\$ 343	\$1,037,202	\$ 512,543	\$ (45,336)	\$ 1,504,752

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

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: Summary of Significant Accounting Policies

The accompanying consolidated financial statements reflect the application of the significant accounting policies described below.

Nature of Operations

Cognex Corporation ("the Company" or "Cognex") is a leading global provider of machine vision products and solutions that improve efficiency and quality and address some of the most critical manufacturing and distribution challenges.

Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities as of the balance sheet date, and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates. Significant estimates and judgments include those related to revenue recognition, income taxes, and business combinations.

Basis of Consolidation

The consolidated financial statements include the accounts of Cognex Corporation and its subsidiaries, all of which are wholly owned. All intercompany accounts and transactions have been eliminated.

Foreign Currency Translation

The financial statements of the Company's foreign subsidiaries, where the local currency is the functional currency, are translated using exchange rates in effect at the end of the year for assets and liabilities and average exchange rates during the year for results of operations. The resulting foreign currency translation adjustment, net of tax, is included in shareholders' equity as accumulated other comprehensive loss.

Fair Value Measurements

The Company applies a three-level valuation hierarchy for fair value measurements. The categorization of assets and liabilities within the valuation hierarchy is based on the lowest level of input that is significant to the measurement of fair value. Level 1 inputs to the valuation methodology utilize unadjusted quoted market prices in active markets for identical assets and liabilities. Level 2 inputs to the valuation methodology are other observable inputs, including quoted market prices for similar assets and liabilities, quoted prices for identical and similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data. Level 3 inputs to the valuation methodology are unobservable inputs based on management's best estimate of the inputs that market participants would use in pricing the asset or liability at the measurement date, including assumptions about risk. A change to the level of an asset or liability within the fair value hierarchy is determined at the end of a reporting period.

Cash, Cash Equivalents, and Investments

Money market instruments, as well as debt securities with original maturities of three months or less, are classified as cash equivalents and are stated at amortized cost. Debt securities with original maturities greater than three months and remaining maturities of one year or less are classified as current investments. Debt securities with remaining maturities greater than one year are classified as non-current investments. In July 2023, the Company's investment policy was modified to reduce effective maturities of newly purchased securities to up to five years. As of December 31, 2023, the Company held investments with maturities in excess of the five-year limit that were approved as pre-existing exceptions to the new policy.

Debt securities with original maturities greater than three months are designated as available-for-sale and are reported at fair value, with unrealized gains and losses, net of tax, included in shareholders' equity as accumulated other comprehensive loss. Realized gains and losses are calculated using the specific identification method. Realized gains and losses, interest income, and the amortization of the discount or premium on debt securities arising at acquisition, are included in "Investment income" on the Consolidated Statements of Operations.

Management monitors its debt securities to determine whether a loss exists related to the credit quality of the issuer. If the present value of the cash flows expected to be collected from the security is less than the amortized cost basis of the security, then a credit loss exists and an allowance against the security for credit losses is recorded. The

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

allowance is limited to the amount by which fair value is below amortized cost, recognizing that the investment could be sold at fair value. Credit losses continue to be remeasured in subsequent reporting periods. Credit losses and recoveries related to debt securities are included in "Other income (expense)" on the Consolidated Statements of Operations. When developing an estimate of expected credit losses, management considers all relevant information including historical experience, current conditions, and reasonable forecasts of expected future cash flows.

Accounts Receivable

The Company extends credit with various payment terms to customers based on an evaluation of their financial condition. Accounts that are outstanding longer than the payment terms are considered to be past due. The Company establishes an allowance against accounts receivable for credit losses when it determines receivables are at risk for collection based on the length of time the receivable has been outstanding, the customer's current ability to pay its obligations to the Company, and general economic and industry conditions, as well as various other factors. Receivables are written off against this allowance in the period they are determined to be uncollectible and payments subsequently received on previously written-off receivables are recorded as a recovery of the credit loss. Credit losses and recoveries related to accounts receivable are included in "Selling, general, and administrative expenses" on the Consolidated Statements of Operations.

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using standard costs, which approximates actual costs under the first-in, first-out (FIFO) method. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation.

Purchase price variances are incurred when actual costs are different than standard costs due to favorable or unfavorable market prices. Management applies judgment to recognize purchase price variances in the same period that the associated standard costs of the finished goods that consume these components are sold.

The Company's inventory is subject to technological change or obsolescence. The Company reviews inventory quantities on hand and estimates excess and obsolescence exposures based on assumptions about future demand, product transitions, general economic and industry conditions, and other circumstances, and records reserves to reduce the carrying value of inventories to their net realizable value. If actual future demand is less than estimated, additional inventory write-downs would be required.

The Company generally disposes of obsolete inventory upon determination of obsolescence. The Company does not dispose of excess inventory immediately, due to the possibility that some of this inventory could be sold to customers as a result of differences between actual and forecasted demand. When inventory has been written down below cost, such reduced amount is considered the new cost basis for subsequent accounting purposes. As a result, the Company could recognize a higher-than-normal gross margin if the reserved inventory were subsequently sold.

In accordance with the accounting principles applied in business combinations, acquired inventories are recorded at fair value on the acquisition date. This valuation policy typically results in the write-up of inventories above the acquired company's pre-acquisition carrying value, which results in a lower-than-normal gross margin when these acquired inventories are sold.

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost and depreciated using the straight-line method over the assets' estimated useful lives. Buildings' original useful lives are 39 years, building improvements' useful lives are ten years, and the useful lives of computer hardware and software, manufacturing test equipment, and furniture and fixtures range from two to ten years. Land that is leased or granted, as well as leasehold improvements, are depreciated over the shorter of the estimated useful lives or the remaining terms of the leases. Maintenance and repairs are expensed when incurred; additions and improvements are capitalized. Upon retirement or disposition, the cost and related accumulated depreciation of the disposed assets are removed from the accounts, with any resulting gain or loss included in current operations.

In accordance with the accounting principles applied in business combinations, acquired property, plant, and equipment are recorded at fair value on the acquisition date. This valuation policy typically results in the write-up of property, plant, and equipment above the acquired company's pre-acquisition carrying value, which results in a higher depreciation expense over the estimated lives of the assets.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Internal-use Software

Internal-use software is software acquired, internally developed, or modified solely to meet the Company's internal needs, and during the software's development, no substantive plan exists to sell the software. The accounting treatment for computer software developed for internal use depends on the nature of activities performed at each stage of development. The preliminary project stage includes conceptual formulation of design alternatives, determination of system requirements, vendor demonstrations, and final selection of vendors, and during this stage costs are expensed as incurred. The application development stage includes software configuration, coding, hardware installation, and testing. During this stage, certain costs are capitalized, including external direct costs of materials and services, as well as payroll and payroll-related costs for employees who are directly associated with the project, while certain costs are expensed as incurred, including training and data conversion costs. The post-implementation stage includes support and maintenance, and during this stage costs are expensed as incurred.

Capitalization begins when both the preliminary project stage is completed and management commits to funding the project. Capitalization ceases at the point the project is substantially complete and ready for its intended use, that is, after all substantial testing is completed. Costs of specified upgrades and enhancements to internal-use software are capitalized if it is probable that those expenditures result in additional functionality. Capitalized costs are amortized on a straight-line basis over the estimated useful life.

Leases

At inception of a contract, the Company determines whether that contract is or contains a lease by assessing whether there is an identified asset and whether the contract conveys the right to control the use of the identified asset for a period of time in exchange for consideration. The Company has control of the asset if it has the right to direct the use of the asset and obtains substantially all of the economic benefits from the use of the asset throughout the period of use.

As a practical expedient, the Company does not recognize a lease asset or lease liability for leases with a lease term of twelve months or less. In the determination of the lease term, the Company considers the existence of extension or termination options and the probability of those options being exercised.

Lease contracts may include fixed lease components and non-lease components, such as common area maintenance and utilities for property leases. As a practical expedient, the Company accounts for the non-lease components together with the lease components as a single lease component for all of its leases.

The Company classifies a lease as a finance lease when it meets any of the following criteria at the lease commencement date: (1) the lease transfers ownership of the underlying asset to the Company by the end of the lease term; (2) the lease grants the Company an option to purchase the underlying asset that the Company is reasonably certain to exercise; (3) the lease term is for the major part of the remaining economic life of the underlying asset (the Company considers a major part to be 75% or more of the remaining economic life of the underlying asset); (4) the present value of the sum of the lease payments and any residual value guaranteed by the Company equals or exceeds substantially all of the fair value of the underlying asset (the Company considers substantially all the fair value to be 90% or more of the fair value of the underlying asset amount); or (5) the underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term. When none of the criteria above are met, the Company classifies the lease as an operating lease.

On the lease commencement date, the Company records a lease asset and lease liability on the balance sheet. The lease asset consists of: (1) the amount of the initial lease liability; (2) any lease payments made to the lessor at or before the lease commencement date, minus any lease incentives received; and (3) any initial direct cost incurred by the Company. Initial direct costs are incremental costs of a lease that would not have been incurred if the lease had not been obtained and are capitalized as part of the lease asset. The lease liability equals the present value of the future cash payments discounted using the Company's incremental borrowing rate. The Company's incremental borrowing rate is the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments over a similar term, which, through year ended December 31, 2023, was estimated using the Secured Overnight Financing Rate (SOFR) plus a 2% credit risk spread.

Operating lease expense equals the total cash payments recognized on a straight-line basis over the lease term. The amortization of the lease asset is calculated as the straight-line lease expense less the accretion of the interest on the lease liability each period. The lease liability is reduced by the cash payment less the interest each period.

Goodwill

Goodwill is stated at cost. The Company evaluates the potential impairment of goodwill annually each fourth quarter

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and whenever events or circumstances indicate the carrying value of the goodwill may not be recoverable. The Company performs a qualitative assessment of goodwill to determine whether further impairment testing is necessary. Factors that management considers in this assessment include general economic and industry conditions, overall financial performance (both current and projected), changes in strategy, changes in the composition or carrying amount of net assets, and market capitalization. If this qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying value, the Company would proceed to perform a quantitative impairment test. Under this quantitative analysis, the fair value of the reporting unit is compared with its carrying value, including goodwill. If the carrying value exceeds the fair value of the reporting unit, the Company recognizes an impairment charge. The Company estimates the fair value of its reporting unit using the income approach based on a discounted cash flow model. In addition, the Company uses the market approach, which compares the reporting unit to publicly traded companies and transactions involving similar businesses, to support the conclusions based on the income approach.

Intangible Assets

Intangible assets are stated at cost and amortized over the assets' estimated useful lives. Intangible assets are either amortized in relation to the relative cash flows anticipated from the intangible asset or using the straight-line method, depending on facts and circumstances. The useful lives of customer relationships range from five to fifteen years, completed technologies from five to nine years, non-compete agreements from three to seven years, and trademarks for three years. In-process technology is an indefinite-lived intangible asset until the technology is completed, at which point it is amortized over its estimated useful life.

The Company evaluates the potential impairment of intangible assets whenever events or circumstances indicate the carrying value of the assets may not be recoverable. For finite-lived intangible assets that are subject to amortization, the Company follows a two-step process for impairment testing. In step one, known as the recoverability test, the carrying value of the asset is compared to the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If the sum of the undiscounted future cash flows is less than the carrying value, the asset is not recoverable and step two is performed. In step two, the impairment charge is measured as the amount by which the carrying value of the asset exceeds its fair value.

Warranty Obligations

The Company warrants its products to be free from defects in material and workmanship for periods primarily ranging from one to three years from the time of sale based on the product being purchased and the terms of the customer arrangement. Warranty obligations are evaluated and recorded at the time of sale since it is probable that customers will make claims under warranties related to products that have been sold and the amount of these claims can be reasonably estimated based on historical costs to fulfill claims. Obligations may also be recorded subsequent to the time of sale whenever specific events or circumstances impacting product quality become known that would not have been taken into account using historical data.

Contingencies

Loss contingencies are accrued if the loss is probable and the amount of the loss can be reasonably estimated. Legal costs associated with potential loss contingencies are expensed as incurred.

Derivative Instruments

Derivative instruments are recorded on the Consolidated Balance Sheets at fair value. Changes in the fair value of the Company's economic hedges utilizing foreign currency forward contracts are included in "Foreign currency gain (loss)" on the Consolidated Statements of Operations. When the Company is engaged in more than one outstanding derivative contract with the same counterparty and also has a legally enforceable master netting agreement with that counterparty, the "net" mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty. The cash flows from derivative instruments are presented in the same category on the Consolidated Statements of Cash Flows as the category for the cash flows from the hedged item. Generally, this accounting policy election results in cash flows related to derivative instruments being classified as an operating activity on the Consolidated Statements of Cash Flows.

Revenue Recognition

The Company recognizes revenue in accordance with Accounting Standards Codification (ASC) 606, "Revenue from Contracts with Customers." The core principle of ASC 606 is to recognize revenue in a manner that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Company expects to be entitled in exchange for those goods or services. The framework in support of this core principle includes: (1) identifying the contract with the customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations; and (5) recognizing revenue when (or as) the performance obligations are satisfied.

Identifying the Contract with the Customer

The Company identifies contracts with customers as agreements that create enforceable rights and obligations, which typically take the form of customer contracts or purchase orders. The Company accounts for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance, and collectability of consideration is probable.

Identifying the Performance Obligations in the Contract

The Company identifies performance obligations as promises in contracts to transfer distinct goods or services. Standard products and services that the Company regularly sells separately, which customers can benefit from either on their own or with other readily available resources and are distinct within the context of the customer contract, are accounted for as distinct performance obligations. Application-specific customer solutions that are comprised of a combination of products and services are accounted for as one performance obligation to deliver a total solution to the customer. On-site support services that are provided to the customer after the solution is deployed are accounted for as a separate performance obligation.

Shipping and handling activities for which the Company is responsible under the terms and conditions of the sale are not accounted for as performance obligations but as fulfillment costs. These activities are required to fulfill the Company's promise to transfer the goods and are expensed when revenue is recognized.

The Company does not assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract. If revenue is recognized before immaterial promises have been completed, then the costs related to such immaterial promises are accrued at the time of sale.

Determining the Transaction Price

The Company determines the transaction price as the amount of consideration it expects to receive in exchange for transferring promised goods or services to the customer. Amounts collected from customers for sales taxes are excluded from the transaction price.

If a contract includes a variable amount, such as a rebate, then the Company estimates the transaction price using either the expected value or the most likely amount of consideration to be received, depending on the specific facts and circumstances. The Company includes estimated variable consideration in the transaction price only to the extent it is probable that a significant reversal of revenue will not occur when the uncertainty is resolved. The Company updates its estimate of variable consideration at the end of each reporting period to reflect changes in facts and circumstances.

The Company typically does not grant customers the explicit right to return product. However, from time to time, the Company may allow a customer to return a product. As a practical expedient, the Company estimates the transaction price using the expected value based on its history of return experience using a portfolio approach in which the Company's total revenue is reduced by an estimate of total customer returns. Management reasonably expects that the effect of applying a portfolio approach to a group of contracts would not differ materially from considering each contract separately.

Allocating the Transaction Price to the Performance Obligations

The Company allocates the transaction price to each performance obligation at contract inception based on a relative stand-alone selling price basis, or the price at which the Company would sell the good or service separately to similar customers in similar circumstances.

Recognizing Revenue When (or As) the Performance Obligations are Satisfied

The Company recognizes revenue when it transfers the promised goods or services to the customer. Revenue for standard products is recognized at the point in time when the customer obtains control of the goods, which is typically upon shipment or delivery when the customer has legal title, physical possession, the risks and rewards of ownership, and an enforceable obligation to pay for the products. Revenue for services, which are not material, is typically recognized over the time the service is provided.

Revenue for application-specific customer solutions is recognized at the point in time when the solution is validated, which is the point in time when the Company can objectively determine that the agreed-upon specifications in the

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

contract have been met and the customer should reasonably accept the performance obligations in the arrangement. Although the customer may have taken legal title and physical possession of the goods when they arrived at the customer's designated site, the significant risks and rewards of ownership transfer to the customer only upon validation. Revenue for on-site support services related to these solutions is recognized over the time the service is provided.

In certain instances, an arrangement may include customer-specified acceptance provisions or performance guarantees that allow the customer to accept or reject delivered products that do not meet the customer's requirements. If the Company can objectively determine that control of a good or service has been transferred to the customer in accordance with the agreed-upon requirements in the contract, then customer acceptance is a formality. If acceptance provisions are presumed to be substantive, then revenue is deferred until customer acceptance.

For the Company's standard products and services, revenue recognition and billing typically occur at the same time. For application-specific customer solutions, however, the agreement with the customer may provide for billing terms which differ from revenue recognition criteria, resulting in either deferred revenue or unbilled revenue. Credit assessments are performed to determine payment terms, which vary by region, industry, and customer. Prepayment terms result in contract liabilities for customer deposits. When credit is granted to customers, payment is typically due 30 to 90 days from billing. The Company's contracts have an original expected duration of less than one year, and therefore as a practical expedient, the Company has elected to ignore the impact of the time value of money on a contract and to expense sales commissions. The Company recognizes an asset for costs to fulfill a contract if the costs relate directly to the contract and to future performance, and the costs are expected to be recovered.

Management exercises judgment when determining the amount of revenue to be recognized each period. Such judgments include, but are not limited to, assessing the customer's ability and intention to pay substantially all of the contract consideration when due, determining when two or more contracts should be combined and accounted for as a single contract, determining whether a contract modification has occurred, assessing whether promises are immaterial in the context of the contract, determining whether material promises in a contract represent distinct performance obligations, estimating the transaction price for a contract that contains variable consideration, determining the stand-alone selling price of each performance obligation, determining whether control is transferred over time or at a point in time for performance obligations, and assessing whether formal customer acceptance provisions are substantive.

Research and Development

Research and development costs primarily include costs related to personnel, prototyping materials and equipment, and outside services. Research and development costs are expensed when incurred until technological feasibility has been established for the product. Thereafter, all software costs may be capitalized until the product is available for general release to customers. The Company determines technological feasibility at the time the product reaches beta in its stage of development. Historically, the time incurred between beta and general release to customers has been short, and therefore, the costs have been insignificant.

Advertising Costs

Advertising costs are expensed as incurred and totaled \$1,190,000 in 2023, \$1,257,000 in 2022, and \$1,965,000 in 2021.

Stock-Based Compensation

The Company's stock-based awards that result in compensation expense consist of stock options and restricted stock units ("RSUs"), including performance restricted stock units ("PRSUs"). The Company has reserved a specific number of shares of its authorized but unissued shares for issuance upon the exercise of stock options or the settlement of RSUs. When a stock option is exercised or an RSU is settled, the Company issues new shares from this pool. Management is responsible for determining the appropriate valuation model and estimating the fair value of stock-based awards, and in doing so, considers a number of factors, including information provided by an outside valuation advisor and the observable market price of the Company's common stock on the grant date. The fair value of RSUs is determined based on the observable market price of the Company's common stock on the grant date less the present value of expected future dividends. The fair value of PRSUs where the performance goal includes service and market conditions is calculated using a Monte Carlo simulation model to estimate the probability of satisfying the service and market conditions stipulated in the award grant. When determining the grant-date fair value of stock-based awards, management further considers whether an adjustment is required to the observable

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market price or volatility of the Company's common stock that is used in the valuation as a result of material non-public information, if that information is expected to result in a material increase in share price.

The Company recognizes compensation expense related to stock-based awards using the graded attribution method, in which expense is recognized on a straight-line basis over the service period for each separately vesting portion of the stock option or RSU as if the award was, in substance, multiple awards. The amount of compensation expense recognized at the end of the vesting period is based on the number of awards for which the requisite service has been completed. No compensation expense is recognized for awards that are forfeited for which the employee does not render the requisite service. The term "forfeitures" is distinct from "expirations" and represents only the unvested portion of the surrendered award. The Company applies estimated forfeiture rates to its unvested awards to arrive at the amount of compensation expense that is expected to be recognized over the requisite service period. At the end of each separately vesting portion of an award, the expense that was recognized by applying the estimated forfeiture rate is compared to the expense that should be recognized based on the employee's service, and an increase or decrease to compensation expense is recorded to true up the final expense.

Taxes

The Company recognizes a tax position in its financial statements when that tax position, based solely upon its technical merits, is more likely than not to be sustained upon examination by the relevant taxing authority. Those tax positions failing to qualify for initial recognition are recognized in the first interim period in which they meet the more likely than not standard, or are resolved through negotiation or litigation with the taxing authority, or upon expiration of the statutes of limitations. Derecognition of a tax position that was previously recognized occurs when an entity subsequently determines that a tax position no longer meets the more likely than not threshold of being sustained.

Only the portion of the liability that is expected to be paid within one year is classified as a current liability. As a result, liabilities expected to be resolved without the payment of cash (e.g., resolution due to the expiration of the statutes of limitations) or are not expected to be paid within one year are not classified as current. It is the Company's policy to record estimated interest and penalties as income tax expense and tax credits as a reduction in income tax expense.

Deferred tax assets and liabilities are determined based on the differences between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates that will be in effect when these differences reverse. Valuation allowances are provided if, based on the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. The Company accounts for the impact of the Global Intangible Low-Taxed Income (GILTI) tax in deferred taxes.

Sales tax in the United States and similar taxes in other jurisdictions that are collected from customers and remitted to government authorities are presented on a gross basis (i.e., a receivable from the customer with a corresponding payable to the government). Amounts collected from customers and retained by the Company during tax holidays are recognized as non-operating income when earned.

Net Income Per Share

Basic net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period plus potential dilutive common shares. Dilutive common equivalent shares consist of stock options and restricted stock units and are calculated using the treasury stock method. Common equivalent shares do not qualify as participating securities. In periods where the Company records a net loss, potential common stock equivalents are not included in the calculation of diluted net loss per share as their effect would be anti-dilutive.

Comprehensive Income

Comprehensive income is defined as the change in equity of a company during a period from transactions and other events and circumstances, excluding transactions resulting from investments by owners and distributions to owners. Accumulated other comprehensive loss, net of tax, consists of foreign currency translation adjustment losses of \$36,550,000 and \$48,050,000, as of December 31, 2023 and December 31, 2022, respectively; net unrealized losses on available-for-sale investments of \$7,515,000 and \$19,976,000 as of December 31, 2023 and December 31, 2022, respectively; and losses on currency swaps, net of gains on long-term intercompany loans of \$1,271,000 at each year end.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Concentrations of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, investments, and accounts receivable. The Company has certain domestic and foreign cash balances that exceed the insured limits set by the Federal Deposit Insurance Corporation (FDIC) in the United States and equivalent regulatory agencies in foreign countries. The Company primarily invests in investment-grade debt securities and has established guidelines relative to credit ratings, diversification, and maturities of its debt securities that maintain liquidity and safety. The Company has historically not experienced any significant realized losses on its debt securities. The Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. The Company has historically not experienced any significant losses related to the collection of its accounts receivable.

A significant portion of the Company's products is presently manufactured by a third-party contractor located in Indonesia. This contract manufacturer has agreed to provide the Company with termination notification periods and last-time-buy rights, if and when that may be applicable.

Certain key electronic and mechanical components, such as integrated circuit chips, are fundamental to the design of Cognex products. Due to the impact of global supply chain challenges or other factors, we have experienced, and may continue to experience, disruptions to the supply of components for our products that have resulted, and may continue to result, in higher purchase costs, delivery costs, and manufacturing delays.

The Company sources components from preferred vendors that are selected based on price and performance considerations. In the event of a supply disruption from a preferred vendor, these components may typically be purchased from alternative vendors, which may result in higher purchase costs and manufacturing delays based on the time required to identify and obtain sufficient quantities from an alternative source. Certain of the Company's products utilize components that are available from only one source. If we are unable to secure adequate supply from these sources, we may have to redesign our products, which may lead to higher costs, delays in manufacturing, and possible loss of sales.

Business Combinations

The Company determines whether a transaction qualifies as a business combination by applying the definition of a business, which requires the assets acquired and liabilities assumed to be inputs and processes that have the ability to contribute to the creation of outputs. The Company accounts for business combinations under the acquisition method of accounting, which requires the following steps: (1) identifying the acquirer, (2) determining the acquisition date, (3) recognizing and measuring the identifiable assets acquired and the liabilities assumed, and (4) recognizing and measuring goodwill. The Company measures the identifiable assets acquired and liabilities assumed at their estimated fair values as of the acquisition date. Management is responsible for determining the appropriate valuation model and estimated fair values, and in doing so, considers a number of factors, including information provided by an outside valuation advisor. Management bases the fair value of assets, including identifiable intangible assets acquired and liabilities assumed, on detailed valuations that use information and assumptions provided by management, which consider management's best estimates of inputs and assumptions that a market participant would use. Goodwill is recognized as of the acquisition date as the excess of the consideration transferred over the net amount of assets acquired and liabilities assumed. Transaction costs are expensed as incurred.

Restructuring Charges

One-time employee termination benefits associated with restructuring activities exist at the date the plan of termination has been communicated to employees (the "communication date") and all of the following criteria are met: (1) management, having the authority to approve the action, has committed to the plan of termination, (2) the plan identifies the number of employees to be terminated, their job classifications or functions and their locations, and the expected completion date, (3) the plan establishes the terms of the benefit arrangement in sufficient detail, and (4) actions required to complete the plan indicate it is unlikely that significant changes to the plan will be made. If employees are not required to render service until they are terminated in order to receive the termination benefits or will not be retained to render service beyond a minimum retention period, a liability for the termination benefits is recognized and measured at fair value at the communication date. Otherwise, a liability is measured initially at the communication date based on the fair value of the liability as of the termination date and recognized ratably over the future service period. Changes to the fair value of the liability are recorded as restructuring adjustments.

Closures of leased offices as part of a restructuring activity prior to the end of the contractual lease term are treated as abandoned right-to-use assets when the Company ceases to use the property for economic benefit and lacks

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

either the intent or ability to sublease. The lease asset is written down to zero as of the abandonment date. Estimates of contract termination costs assume the Company will be obligated to pay the remaining rent over the contract period, and the lease liability continues to be recorded on the balance sheet. Subsequent negotiations that result in early contract terminations are recorded as favorable restructuring adjustments.

Other associated costs as part of a restructuring activity include costs to consolidate facilities, costs to relocate employees, and legal fees incurred to research local statutory requirements and prepare termination agreements. These costs are recognized in the period in which the liability is incurred, which generally corresponds to the period in which the services are rendered.

NOTE 2: New Pronouncements

Accounting Standards Update (ASU) 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures

The amendments in this ASU apply to all entities that are subject to Topic 740, Income Taxes. The amendments require public business entities to disclose specific categories in their rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. They also require all entities to disclose income taxes paid, net of refund received, disaggregated by federal, state, and foreign taxes and by individual jurisdictions in which income taxes paid, net of refunds received, is equal to or greater than five percent of total income taxes paid. For public business entities, the amendments in this ASU are effective for annual periods beginning after December 15, 2024. The amendments in this ASU should be applied on a prospective basis. Management does not expect ASU 2023-09 to have a material impact on the Company's financial statements and disclosures.

Accounting Standards Update (ASU) 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures

The amendments in this ASU apply to all public entities, including public entities with a single reportable segment, that are required to report segment information in accordance with Topic 280, Segment Reporting. The amendments require public business entities to provide in interim and annual periods one or more measures of segment profit or loss used by the chief operating decision maker to allocate resources and assess performance. Additionally, the amendments require disclosure of significant segment expenses and other segment items, as well as incremental qualitative disclosures. The amendments in this ASU are effective for fiscal years beginning after December 15, 2023. The amendments in the ASU should be applied on a retrospective basis. We did not early adopt ASU 2023-07. Management does not expect ASU 2023-07 to have a material impact on the Company's financial statements and disclosures.

Accounting Standards Update (ASU) 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting", (ASU) 2021-01, "Reference Rate Reform (Topic 848): Scope", and Accounting Standards Update (ASU) 2022-06, "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848"

The amendments in these ASUs apply to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. Together, the ASUs provide optional expedients and exceptions for applying generally accepted accounting principles (GAAP) to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The expedients and exceptions provided by the amendments do not apply to contract modifications made and hedging relationships entered into or evaluated after December 31, 2024, except for hedging relationships existing as of December 31, 2024 that an entity has elected certain optional expedients for and that are retained through the end of the hedging relationship. The amendments in these ASUs are effective for all entities as of March 12, 2020 through December 31, 2024. Management adopted Topic 848 on January 1, 2023, and now uses the Secured Overnight Financing Rate (SOFR). The adoption did not have a material impact on the Company's financial statements and disclosures.

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NOTE 3: Fair Value Measurements

Financial Assets and Liabilities that are Measured at Fair Value on a Recurring Basis

The following table summarizes the financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2023 (in thousands):

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Assets:			
Money market instruments	\$ 19,413	\$ —	\$ —
Corporate bonds	—	308,816	—
Treasury notes	—	43,523	—
Asset-backed securities	—	19,314	—
Sovereign bonds	—	1,969	—
Economic hedge forward contracts	—	151	—
Liabilities:			
Economic hedge forward contracts	—	106	—

The Company's money market instruments are reported at fair value based on the daily market price for identical assets in active markets, and are therefore classified as Level 1.

The Company's debt securities and forward contracts are reported at fair value based on model-driven valuations in which all significant inputs are observable or can be derived from or corroborated by observable market data for substantially the full term of the asset or liability, and are therefore classified as Level 2. Management is responsible for estimating the fair value of these financial assets and liabilities, and in doing so, considers valuations provided by a large, third-party pricing service. For debt securities, this service maintains regular contact with market makers, brokers, dealers, and analysts to gather information on market movement, direction, trends, and other specific data. They use this information to structure yield curves for various types of debt securities and arrive at the daily valuations. The Company's forward contracts are typically traded or executed in over-the-counter markets with a high degree of pricing transparency. The market participants are generally large commercial banks.

Non-financial Assets that are Measured at Fair Value on a Non-recurring Basis

Non-financial assets, such as property, plant and equipment, operating lease assets, goodwill, and intangible assets, are required to be measured at fair value only when an impairment loss is recognized. The Company evaluates these long-lived assets for impairment whenever events or changes in circumstances, referred to as "triggering events," indicate the carrying value may not be recoverable. The Company did not record impairment charges related to non-financial assets in 2023, 2022, or 2021.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 4: Cash, Cash Equivalents, and Investments

Cash, cash equivalents, and investments consisted of the following (in thousands):

	December 31,	
	2023	2022
Cash	\$ 183,242	\$ 180,959
Money market instruments	19,413	415
Cash and cash equivalents	<u>202,655</u>	<u>181,374</u>
Corporate bonds	124,851	164,055
Asset-backed securities	3,551	26,890
Sovereign bonds	990	—
Agency bonds	—	15,858
Treasury notes	—	11,332
Municipal bonds	—	624
Current investments	<u>129,392</u>	<u>218,759</u>
Corporate bonds	183,965	374,440
Treasury notes	43,523	44,214
Asset-backed securities	15,763	33,539
Sovereign bonds	979	1,924
Non-current investments	<u>244,230</u>	<u>454,117</u>
	<u>\$ 576,277</u>	<u>\$ 854,250</u>

The Company's cash balance included foreign bank balances totaling \$173,614,000 and \$160,611,000 as of December 31, 2023 and 2022, respectively.

Corporate bonds consist of debt securities issued by both domestic and foreign companies; asset-backed securities consist of debt securities collateralized by pools of receivables or loans with credit enhancement; sovereign bonds consist of direct debt issued by foreign governments; agency bonds consist of domestic or foreign obligations of government agencies and government-sponsored enterprises that have government backing; treasury notes consist of debt securities issued by the U.S. government; and municipal bonds consist of debt securities issued by state and local government entities. All of the Company's securities as of December 31, 2023 and 2022 were denominated in U.S. Dollars.

Accrued interest receivable is included in "Prepaid expenses and other current assets" on the Consolidated Balance Sheets and amounted to \$3,169,000 and \$3,620,000 as of December 31, 2023 and 2022, respectively.

The following table summarizes the Company's available-for-sale investments as of December 31, 2023 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Current:				
Corporate bonds	\$ 128,150	\$ —	\$ (3,299)	\$ 124,851
Asset-backed securities	3,637	—	(86)	3,551
Sovereign bonds	1,012	—	(22)	990
Non-current:				
Corporate bonds	189,326	506	(5,867)	183,965
Treasury notes	43,654	82	(213)	43,523
Asset-backed securities	16,773	—	(1,010)	15,763
Sovereign bonds	1,037	—	(58)	979
	<u>\$ 383,589</u>	<u>\$ 588</u>	<u>\$ (10,555)</u>	<u>\$ 373,622</u>

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes the Company's available-for-sale investments as of December 31, 2022 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Current:				
Corporate bonds	\$ 167,558	\$ —	\$ (3,503)	\$ 164,055
Asset-backed securities	27,607	—	(717)	26,890
Agency bonds	16,143	—	(285)	15,858
Treasury notes	11,602	—	(270)	11,332
Municipal bonds	635	—	(11)	624
Non-current:				
Corporate bonds	394,576	561	(20,697)	374,440
Treasury notes	44,333	79	(198)	44,214
Asset-backed securities	35,144	103	(1,708)	33,539
Sovereign bonds	2,095	—	(171)	1,924
	\$ 699,693	\$ 743	\$ (27,560)	\$ 672,876

The following table summarizes the Company's gross unrealized losses and fair values for available-for-sale investments in an unrealized loss position as of December 31, 2023 (in thousands):

	Unrealized Loss Position For Less than 12 Months		Unrealized Loss Position For Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds	\$ 30,770	\$ (359)	\$ 226,643	\$ (8,807)	\$ 257,413	\$ (9,166)
Treasury notes	20,725	(153)	2,441	(60)	23,166	(213)
Asset-backed securities	17,062	(1,049)	2,252	(47)	19,314	(1,096)
Sovereign bonds	—	—	1,968	(80)	1,968	(80)
	\$ 68,557	\$ (1,561)	\$ 233,304	\$ (8,994)	\$ 301,861	\$ (10,555)

The following table summarizes the Company's gross unrealized losses and fair values for available-for-sale investments in an unrealized loss position as of December 31, 2022 (in thousands):

	Unrealized Loss Position For Less than 12 Months		Unrealized Loss Position For Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate bonds	\$ 285,087	\$ (9,591)	\$ 187,153	\$ (14,609)	\$ 472,240	\$ (24,200)
Asset-backed securities	47,582	(2,299)	2,495	(126)	50,077	(2,425)
Treasury notes	32,614	(465)	102	(3)	32,716	(468)
Agency bonds	15,858	(285)	—	—	15,858	(285)
Sovereign bonds	967	(67)	957	(104)	1,924	(171)
Municipal bonds	624	(11)	—	—	624	(11)
	\$ 382,732	\$ (12,718)	\$ 190,707	\$ (14,842)	\$ 573,439	\$ (27,560)

Management monitors debt securities that are in an unrealized loss position to determine whether a loss exists related to the credit quality of the issuer. When developing an estimate of expected credit losses, management considers all relevant information including historical experience, current conditions, and reasonable forecasts of expected future cash flows. Based on this evaluation, no allowance for credit losses on debt securities was recorded as of December 31, 2023, 2022, or 2021. Management currently intends to hold these securities to full value recovery at maturity.

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The following table summarizes the Company's gross realized gains and losses on the sale of debt securities (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Gross realized gains	\$ 111	\$ 133	\$ 246
Gross realized losses	(2,065)	(315)	(10)
Net realized gains (losses)	\$ (1,954)	\$ (182)	\$ 236

Realized gains and losses are included in "Investment income" on the Consolidated Statements of Operations. Prior to the sale of these securities, unrealized gains and losses for these debt securities, net of tax, were recorded in shareholders' equity as accumulated other comprehensive loss.

The following table summarizes the effective maturity dates of the Company's available-for-sale investments as of December 31, 2023 (in thousands):

	<1 Year	1-2 Years	2-3 Years	3-4 Years	4-5 Years	5-7 Years	Total
Corporate bonds	\$ 124,851	\$ 62,596	\$ 44,906	\$ 44,896	\$ 31,567	\$ —	\$ 308,816
Treasury notes	—	2,441	6,115	22,270	12,697	—	43,523
Asset-backed securities	3,551	5,872	3,448	—	—	6,443	19,314
Sovereign bonds	990	979	—	—	—	—	1,969
	\$ 129,392	\$ 71,888	\$ 54,469	\$ 67,166	\$ 44,264	\$ 6,443	\$ 373,622

NOTE 5: Inventories

Inventories consisted of the following (in thousands):

	December 31,	
	2023	2022
Raw materials	\$ 93,201	\$ 71,720
Work-in-process	5,747	906
Finished goods	63,337	49,854
	\$ 162,285	\$ 122,480

In connection with the acquisition of Moritex Corporation in the fourth quarter of 2023 (refer to Note 21), the Company recorded inventories with a fair value of \$22,788,000 on the acquisition date.

The Company recorded provisions for excess and obsolete inventories of \$3,775,000 and \$3,084,000 in 2023 and 2022, respectively, which reduced the carrying value of the inventories to their net realizable value.

NOTE 6: Property, Plant, and Equipment

Property, plant, and equipment consisted of the following (in thousands):

	December 31,	
	2023	2022
Land	\$ 8,805	\$ 3,951
Buildings	34,117	24,533
Building improvements	44,992	45,003
Leasehold improvements	19,611	14,491
Computer hardware and software	55,154	53,663
Manufacturing test equipment	36,182	27,176
Furniture and fixtures	7,361	6,378
	206,222	175,195
Less: accumulated depreciation	(100,373)	(95,481)
	\$ 105,849	\$ 79,714

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In connection with the acquisition of Moritex Corporation in the fourth quarter of 2023 (refer to Note 21), the Company recorded property, plant and equipment with a fair value of \$19,876,000 on the acquisition date.

The Company disposed of property, plant, and equipment with a cost basis of \$12,421,000 and accumulated depreciation of \$12,184,000 in 2023, net of proceeds of \$8,000, resulting in a loss of \$229,000. The Company disposed of property, plant, and equipment with a cost basis of \$17,358,000 and accumulated depreciation of \$16,604,000 in 2022, resulting in a loss of \$754,000. Of this loss, \$735,000 related to production equipment destroyed as a result of the fire at the Company's primary contract manufacturer's plant in Indonesia on June 7, 2022 and is included in "Non-cash impact of charges related to fire (Note 22)" on the Consolidated Statements of Cash Flows.

NOTE 7: Leases

The Company's leases are primarily leased properties across different worldwide locations where the Company conducts its operations. All of these leases are classified as operating leases. Certain leases may contain options to extend or terminate the lease at the Company's sole discretion. As of December 31, 2023, there were no options to terminate and twenty-eight options to extend that were accounted for in the determination of the lease term for the Company's outstanding leases. Certain leases contain leasehold improvement incentives, retirement obligations, escalating clauses, rent holidays, and variable payments tied to a consumer price index. Lease costs associated with variable payments were \$1,175,000 in 2023, \$1,009,000 in 2022, and \$1,253,000 in 2021. There were no restrictions or covenants for the outstanding leases as of December 31, 2023. The Company did not have any leases that had not yet commenced but that created significant rights and/or obligations as of December 31, 2023.

The total operating lease expense was \$11,598,000 in 2023, \$8,939,000 in 2022, and \$8,180,000 in 2021. The total operating lease cash payments were \$10,148,000 in 2023, \$8,548,000 in 2022, and \$8,225,000 in 2021. The total lease expense for leases with a term of twelve months or less for which the Company elected not to recognize a lease asset or lease liability was \$427,000 in 2023, \$144,000 in 2022, and \$154,000 in 2021.

Future operating lease cash payments are as follows (in thousands):

<u>Year Ended December 31,</u>	<u>Amount</u>
2024	\$ 13,612
2025	11,836
2026	9,746
2027	8,851
2028	8,395
Thereafter	53,257
	<u>\$ 105,697</u>

The discounted present value of the future lease cash payments resulted in a lease liability of \$78,601,000 and \$39,752,000 as of December 31, 2023 and 2022, respectively.

In connection with the acquisition of Moritex Corporation in the fourth quarter of 2023 (refer to Note 21), the Company assumed multiple lease agreements, the most significant of which is for a 22,000 square-foot building in Vietnam that serves as a production plant for optical components.

In June 2023, the Company entered into a lease for a 115,000 square-foot building in Singapore to serve as a new distribution center for customers in Asia. The lease contains two components, including an 88,000 square-foot premises with a term of ten years, six months. The Company has the right and option to extend the term of this lease component for an additional period of five years, commencing upon the expiration of the original term. This lease component commenced during the second quarter of 2023, and therefore the Company recorded approximately \$29,639,000, which reflects an estimated extension period of five years, within "Operating lease assets" and "Operating lease liabilities" on the Consolidated Balance Sheets on the commencement date. The second component of this Singapore lease is for a 27,000 square-foot premises with a term of eight years. The commencement date for this lease component is in the fourth quarter of 2025, and therefore it was not yet recorded on the Consolidated Balance Sheets, nor did it create any significant rights and obligations as of December 31, 2023. The Company has the right and option to extend the term of this lease component for an additional period of five years, commencing upon the expiration of the original term. Future payment obligations associated with this lease component total \$13,231,000, none of which was payable in 2023 and which reflects an estimated extension

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

period of five years. Future payment obligations related to this lease component are not included in the future operating lease cash payments table above.

In December 2021, the Company entered into a lease for a 65,000 square-foot building in Southborough, Massachusetts for a term of ten years to serve as a new distribution center for customers in the Americas. The Company has the right and option to extend the term of this lease for an additional period of five years, commencing upon the expiration of the original ten-year term. This lease commenced during the first quarter of 2022, and therefore the Company recorded approximately \$9,271,000, which does not reflect an estimated extension period, within "Operating lease assets" and "Operating lease liabilities" on the Consolidated Balance Sheets on the commencement date.

The weighted-average discount rate was 5.7% and 3.3% for the leases outstanding as of December 31, 2023 and December 31, 2022, respectively. The weighted-average remaining lease term was 10.5 years and 7.8 years for the leases outstanding as of December 31, 2023 and 2022, respectively.

NOTE 8: Goodwill

The changes in the carrying value of goodwill were as follows (in thousands):

	Amount
Balance as of December 31, 2021	\$ 241,713
Acquisition of SAC Sirius Advanced Cybernetics GmbH (refer to Note 21)	2,359
Foreign exchange rate changes	(1,442)
Balance as of December 31, 2022	242,630
Acquisition of Moritex Corporation (refer to Note 21)	145,047
Foreign exchange rate changes	5,504
Balance as of December 31, 2023	<u>\$ 393,181</u>

For its 2023 annual analysis of goodwill, management elected to perform a qualitative assessment. Based on this assessment, management believes it is more likely than not that the fair value of the reporting unit exceeds its carrying value. The Company did not record impairment charges related to goodwill in 2023, 2022, or 2021.

NOTE 9: Intangible Assets

Intangible assets consisted of the following (in thousands):

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Customer relationships	\$ 75,965	\$ (5,352)	\$ 70,613
Completed technologies	62,123	(20,745)	41,378
Trademarks	903	(50)	853
Non-compete agreements	340	(232)	108
Balance as of December 31, 2023	<u>\$ 139,331</u>	<u>\$ (26,379)</u>	<u>\$ 112,952</u>

	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Completed technologies	\$ 28,017	\$ (17,744)	\$ 10,273
Customer relationships	5,838	(3,860)	1,978
Non-compete agreements	340	(177)	163
Balance as of December 31, 2022	<u>\$ 34,195</u>	<u>\$ (21,781)</u>	<u>\$ 12,414</u>

In connection with the acquisition of Moritex Corporation in the fourth quarter of 2023 (refer to Note 21), the Company acquired customer relationships valued at \$66,900,000 with an estimated useful life of fifteen years, completed technologies valued at \$32,300,000 with an estimated useful life of nine years, and trademarks valued at \$850,000 with an estimated useful life of three years.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In connection with the acquisition of SAC Sirius Advanced Cybernetics GmbH ("SAC") in the fourth quarter of 2022, (refer to Note 21), the Company acquired completed technologies valued at \$3,800,000 with an estimated useful life of 7 years.

In 2022, the Company retired approximately \$43,280,000 of intangible assets primarily related to distribution networks and customer relationships that were fully amortized and had a net carrying value of zero on the Consolidated Balance Sheets.

The Company did not record impairment charges related to intangible assets in 2023, 2022 or 2021.

Estimated amortization expense for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

Year Ended December 31,	Amount
2024	\$ 11,389
2025	11,066
2026	10,711
2027	9,737
2028	9,008
Thereafter	61,041
	\$ 112,952

NOTE 10: Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2023	2022
Foreign retirement obligations	\$ 12,835	\$ 7,191
Incentive compensation	10,645	18,554
Salaries and payroll taxes	8,774	8,121
Vacation	5,827	5,847
Warranty obligations	4,244	4,375
Deferred payments related to Sualab Co., Ltd. acquisition (1)	—	19,282
Other	30,049	29,865
	\$ 72,374	\$ 93,235

(1) The total consideration for the Company's 2019 acquisition of Sualab Co., Ltd. included deferred payments, contingent upon the continued employment of key talent, of \$24,040,000 that was paid fully in October 2023. The deferred payments were recorded as compensation expense over the four-year period.

The changes in the warranty obligation were as follows (in thousands):

Balance as of December 31, 2020	\$ 5,406
Provisions for warranties issued during the period	3,256
Fulfillment of warranty obligations	(3,235)
Balance as of December 31, 2021	5,427
Provisions for warranties issued during the period	1,876
Fulfillment of warranty obligations	(2,928)
Balance as of December 31, 2022	4,375
Provisions for warranties issued during the period	2,940
Fulfillment of warranty obligations	(3,078)
Foreign exchange rate changes	7
Balance as of December 31, 2023	\$ 4,244

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 11: Commitments and Contingencies

As of December 31, 2023, the Company had outstanding purchase orders totaling \$61,459,000 to procure inventory from various vendors. Certain of these purchase orders may be canceled by the Company, subject to cancellation penalties. These purchase commitments relate primarily to expected sales in 2024.

A significant portion of the Company's outstanding inventory purchase orders as of December 31, 2023, as well as additional preauthorized commitments to procure strategic components based on the Company's expected customer demand, are placed with the Company's primary contract manufacturer for the Company's assembled products. The Company purchased \$10,616,000, \$5,269,000, and \$547,000 in 2023, 2022, and 2021, respectively, of inventories as a result of the Company's obligation to purchase any non-cancelable and non-returnable components that have been purchased by the contract manufacturer with the Company's preauthorization, when these components have not been consumed within the period defined in the terms of the Company's agreement with this contract manufacturer. While the Company typically expects such purchased components to be used in future production of Cognex finished goods, these components are considered in the Company's reserve estimate for excess and obsolete inventory. Furthermore, the Company accrues for losses on commitments for the future purchase of non-cancelable and non-returnable components from this contract manufacturer at the time that circumstances, such as changes in demand, indicate that the value of the components may not be recoverable, the loss is probable, and management has the ability to reasonably estimate the amount of the loss.

Various claims and legal proceedings generally incidental to the normal course of business are pending or threatened on behalf of or against the Company. While we cannot predict the outcome of these matters, we believe that any liability arising from them will not have a material adverse effect on our financial position, liquidity, or results of operations.

NOTE 12: Indemnification Provisions

Except as limited by Massachusetts law, the by-laws of the Company require it to indemnify certain current or former directors, officers, and employees of the Company against expenses incurred by them in connection with each proceeding in which he or she is involved as a result of serving or having served in certain capacities. Indemnification is not available with respect to a proceeding as to which it has been adjudicated that the person did not act in good faith in the reasonable belief that the action was in the best interests of the Company. The maximum potential amount of future payments the Company could be required to make under these provisions is unlimited. The Company has never incurred significant costs related to these indemnification provisions. As a result, the Company believes the estimated fair value of these provisions is not material.

In the ordinary course of business, the Company may accept standard limited indemnification provisions in connection with the sale of its products, whereby it indemnifies its customers for certain direct damages incurred in connection with third-party patent or other intellectual property infringement claims with respect to the use of the Company's products. The maximum potential amount of future payments the Company could be required to make under these provisions is, in many, but not all instances, subject to fixed monetary limits. The Company has never incurred significant costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the Company believes the estimated fair value of these provisions is not material.

In the ordinary course of business, the Company also accepts limited indemnification provisions from time to time, whereby it indemnifies customers for certain direct damages incurred in connection with bodily injury and property damage arising from the use of the Company's products. Future payments the Company could be required to make under these provisions is generally recoverable under the Company's insurance policies. As a result of this coverage, and the fact that the Company has never incurred significant costs to defend lawsuits or settle claims related to these indemnification provisions, the Company believes the estimated fair value of these provisions is not material.

NOTE 13: Derivative Instruments

The Company's foreign currency risk management strategy is principally designed to mitigate the potential financial impact of changes in the value of transactions and balances denominated in foreign currencies resulting from changes in foreign currency exchange rates. The Company enters into economic hedges utilizing foreign currency forward contracts with maturities that do not exceed approximately three months to manage the exposure to fluctuations in foreign currency exchange rates arising primarily from foreign-denominated receivables and payables. The gains and losses on these derivatives are intended to be offset by the changes in the fair value of the assets and liabilities being hedged. These economic hedges are not designated as hedging instruments for hedge accounting treatment.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Additionally, during 2023, the Company entered into a foreign currency forward contract to exchange U.S. Dollars for ¥40,000,000,000 to hedge the Japanese Yen purchase price of the acquisition of Moritex Corporation (refer to Note 21). Upon the settlement of this contract, the Company recorded a foreign currency loss of \$8,456,000, which was recorded in "Foreign currency gain (loss)" on the Consolidated Statements of Operations.

The Company had the following outstanding forward contracts (in thousands):

Currency	December 31, 2023		December 31, 2022	
	Notional Value	USD Equivalent	Notional Value	USD Equivalent
<i>Derivatives Not Designated as Hedging Instruments:</i>				
Euro	40,000	\$ 44,302	60,000	\$ 64,174
Singapore Dollar	39,700	30,136	—	—
Mexican Peso	145,000	8,505	185,000	9,480
Chinese Renminbi	50,000	7,025	55,000	7,619
Hungarian Forint	2,240,000	6,466	1,590,000	4,238
British Pound	3,345	4,258	3,445	4,161
Japanese Yen	600,000	4,255	700,000	5,281
Canadian Dollar	1,470	1,112	1,730	1,278
Swiss Franc	—	—	1,120	1,218

Information regarding the fair value of the outstanding forward contracts was as follows (in thousands):

	Asset Derivatives			Liability Derivatives		
	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
		December 31, 2023	December 31, 2022		December 31, 2023	December 31, 2022
<i>Derivatives Not Designated as Hedging Instruments:</i>						
Economic hedge forward contracts	Prepaid expenses and other current assets	\$ 151	\$ 27	Accrued expenses	\$ 106	\$ 479

The following table summarizes the gross activity for all derivative assets and liabilities which were presented on a net basis on the Consolidated Balance Sheets due to the right of offset with each counterparty (in thousands):

	Asset Derivatives		Liability Derivatives		
	December 31, 2023	December 31, 2022	December 31, 2023	December 31, 2022	
Gross amounts of recognized assets	\$ 151	\$ 27	Gross amounts of recognized liabilities	\$ 106	\$ 479
Gross amounts offset	—	—	Gross amounts offset	—	—
Net amount of assets presented	\$ 151	\$ 27	Net amount of liabilities presented	\$ 106	\$ 479

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Information regarding the effect of derivative instruments, net of the underlying exposure, on the consolidated financial statements was as follows (in thousands):

		Year Ended December 31,		
		2023	2022	2021
Derivatives Not Designated as Hedging Instruments:				
Gains (losses) recognized in current operations	Foreign currency gain (loss)	<u>\$ (10,023)</u>	<u>\$ 9,823</u>	<u>\$ 4,262</u>

NOTE 14: Revenue Recognition

The following table summarizes disaggregated revenue information by geographic area based on the customer's country of domicile (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Americas	\$ 330,415	\$ 390,573	\$ 435,220
Europe	220,665	234,643	247,744
Greater China	164,115	227,447	200,135
Other Asia	122,352	153,427	153,999
	<u>\$ 837,547</u>	<u>\$ 1,006,090</u>	<u>\$ 1,037,098</u>

The following table summarizes disaggregated revenue information by revenue type (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Standard products and services	\$ 734,140	\$ 848,153	\$ 889,253
Application-specific customer solutions	103,407	157,937	147,845
	<u>\$ 837,547</u>	<u>\$ 1,006,090</u>	<u>\$ 1,037,098</u>

Costs to Fulfill a Contract

Costs to fulfill a contract are included in "Prepaid expenses and other current assets" on the Consolidated Balance Sheets and amounted to \$13,265,000 and \$14,578,000 as of December 31, 2023 and 2022, respectively.

Accounts Receivable, Contract Assets, and Contract Liabilities

Accounts receivable represent amounts billed and currently due from customers which are reported at their net estimated realizable value. The Company maintains an allowance against its accounts receivable for credit losses. Contract assets consist of unbilled revenue which arises when revenue is recognized in advance of billing primarily for certain application-specific customer solutions contracts. Contract liabilities consist of deferred revenue and customer deposits which arise when amounts are billed to or collected from customers in advance of revenue recognition.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes changes in the allowance for credit losses (in thousands):

	Amount
Balance as of December 31, 2021	\$ 776
Increases to the allowance for credit losses	191
Write-offs, net of recoveries	(237)
Foreign exchange rate changes	—
Balance as of December 31, 2022	730
Increases to the allowance for credit losses	500
Write-offs, net of recoveries	(645)
Foreign exchange rate changes	(2)
Balance as of December 31, 2023	<u>\$ 583</u>

The following table summarizes the deferred revenue and customer deposits activity (in thousands):

	Amount
Balance as of December 31, 2021	\$ 35,743
Deferral of revenue billed in the current period, net of recognition	39,076
Recognition of revenue deferred in prior period	(31,520)
Foreign exchange rate changes	(2,512)
Balance as of December 31, 2022	40,787
Deferral of revenue billed in the current period, net of recognition	21,538
Recognition of revenue deferred in prior period	(20,987)
Returned customer deposit	(9,205)
Foreign exchange rate changes	(608)
Balance as of December 31, 2023	<u>\$ 31,525</u>

As a practical expedient, the Company has elected not to disclose the aggregate amount of the transaction price allocated to unsatisfied performance obligations for our contracts that have an original expected duration of less than one year. The remaining unsatisfied performance obligations for our contracts that have an original expected duration of more than one year, primarily related to extended warranties, is not material.

NOTE 15: Shareholders' Equity

Preferred Stock

The Company has 400,000 shares of authorized but unissued \$.01 par value preferred stock.

Common Stock

On April 25, 2018, the Company's shareholders approved an amendment to the Company's Articles of Organization to increase the authorized number of shares of \$.002 par value common stock from 200,000,000 to 300,000,000.

Each outstanding share of common stock entitles the record holder to one vote on all matters submitted to a vote of the Company's shareholders. Common shareholders are also entitled to dividends when and if declared by the Company's Board of Directors.

Stock Repurchases

In October 2018, the Company's Board of Directors authorized the repurchase of \$200,000,000 of the Company's common stock. Under this October 2018 program, in addition to repurchases made in prior years, the Company repurchased 957,000 shares at a cost of \$78,652,000 in 2021, which completed purchases under the October 2018 program.

In March 2020, the Company's Board of Directors authorized the repurchase of an additional \$200,000,000 of the Company's common stock. Under this March 2020 program, the Company repurchased 1,060,000 shares, including 5,000 shares that were repurchased in 2021 and settled in 2022, at a cost of \$83,000,000 in 2021, and 1,677,000 shares at a cost of \$117,000,000 in 2022, which completed purchases under the March 2020 program.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In March 2022, the Company's Board of Directors authorized the repurchase of an additional \$500,000,000 of the Company's common stock. Under this March 2022 program, the Company repurchased 1,682,000 shares at a cost of \$87,314,000 in 2022 and 1,723,000 shares at a cost of \$79,794,000 in 2023, leaving a remaining balance of \$332,892,000. The 2023 repurchase included \$446,000 of buyback Excise Tax in accordance with the Inflation Reduction Act of 2022.

The Company may repurchase shares under this program in future periods depending on a variety of factors, including, among other things, the impact of dilution from employee stock awards, stock price, share availability, and cash requirements. The Company is authorized to make repurchases of its common stock through open market purchases, pursuant to Rule 10b5-1 trading plans, or in privately negotiated transactions.

Dividends

The Company's Board of Directors declared and paid cash dividends of \$0.060 per share in the first, second, and third quarters of 2021, \$0.065 per share in the fourth quarter of 2021 and in the first, second, and third quarters of 2022, and \$0.070 per share in the fourth quarter of 2022 and in the first, second, and third quarters of 2023. The dividend was increased to \$0.075 per share in the fourth quarter of 2023.

Future dividends will be declared at the discretion of the Company's Board of Directors and will depend on such factors as the Board deems relevant, including, among other things, the Company's ability to generate positive cash flow from operations.

NOTE 16: Stock-Based Compensation

Stock Plans

The Company's stock-based awards that result in compensation expense consist of stock options, restricted stock units ("RSUs"), and performance restricted stock units ("PRSUs"). In May 2023, the shareholders of the Company approved the Cognex Corporation 2023 Stock Option and Incentive Plan (the "2023 Plan"). The 2023 Plan permits awards of stock options (both incentive and non-qualified options), stock appreciation rights, RSUs, and PRSUs. Up to 8,100,000 shares of common stock (subject to adjustment in the event of stock splits and other similar events) may be issued pursuant to awards granted under the 2023 Plan. In connection with the approval of the 2023 Plan, no further awards will be made under the Cognex Corporation 2001 General Stock Option Plan, as amended and restated (the "2001 Plan"), and the Cognex Corporation 2007 Stock Option and Incentive Plan, as amended and restated (the "2007 Plan"). With the approval of the 2023 Plan, the 10,610,800 shares of common stock subject to awards granted under the 2001 Plan and the 2007 Plan that were outstanding as of May 3, 2023 may become eligible for issuance under the 2023 Plan if such awards are forfeited, cancelled, or otherwise terminated (other than by exercise) (the "Carryover Shares"). As of December 31, 2023, forfeitures, cancellations, and other terminations from the 2001 Plan and the 2007 Plan have resulted in 343,492 Carryover Shares, raising the authorized total shares that may be issued under the 2023 Plan to 8,443,492.

As of December 31, 2023, the Company had 7,978,000 shares available for issuance under its stock plans. Stock options are granted with an exercise price equal to the market value of the Company's common stock at the grant date and generally vest over four or five years based on continuous employment and expire ten years from the grant date. RSUs generally vest upon three or four years of continuous employment or incrementally over such three or four year periods. PRSUs generally vest upon three years of continuous employment and achievement of performance criteria established by the Compensation Committee of our Board of Directors on or prior to the grant date. Participants are not entitled to dividends on stock options, RSUs, or PRSUs.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Stock Options

The following table summarizes the Company's stock option activity:

	Shares (in thousands)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of December 31, 2022	8,467	\$ 51.56		
Granted	1,541	46.33		
Exercised	(330)	33.64		
Forfeited or expired	(670)	57.65		
Outstanding as of December 31, 2023	9,008	\$ 50.87	5.92	\$ 17,164
Exercisable as of December 31, 2023	5,207	\$ 47.78	4.42	\$ 16,212
Options vested or expected to vest as of December 31, 2023 (1)	8,548	\$ 50.79	5.78	\$ 16,896

(1) In addition to the vested options, the Company expects a portion of the unvested options to vest at some point in the future. Options expected to vest are calculated by applying an estimated forfeiture rate to the unvested options.

The total cash received as a result of stock option exercises was \$11,104,000 in 2023, \$12,267,000 in 2022, and \$63,860,000 in 2021. In connection with these exercises, the tax benefit (expense) realized by the Company was \$(4,691,000) in 2023, \$2,548,000 in 2022, and \$46,529,000 in 2021.

The fair values of stock options granted in each period presented were estimated using the following weighted-average assumptions:

	Year Ended December 31,		
	2023	2022	2021
Risk-free rate	4.0 %	2.2 %	1.3 %
Expected dividend yield	0.61 %	0.44 %	0.27 %
Expected volatility	39 %	37 %	39 %
Expected term (in years)	5.0	5.5	6.0

Risk-free rate

The risk-free rate was based on a treasury instrument whose term was consistent with the contractual term of the option.

Expected dividend yield

The current dividend yield was calculated by annualizing the cash dividend declared by the Company's Board of Directors and dividing that result by the closing stock price on the grant date.

Expected volatility

The expected volatility was based on a combination of historical volatility of the Company's common stock over the contractual term of the option and implied volatility for traded options of the Company's stock.

Expected term

The expected term was derived from the binomial lattice model from the impact of events that trigger exercises over time.

The weighted-average grant-date fair value of stock options granted was \$17.76 in 2023, \$21.39 in 2022, and \$33.79 in 2021.

The total intrinsic value of stock options exercised was \$6,227,000 in 2023, \$8,424,000 in 2022, and \$80,369,000 in 2021. The total fair value of stock options vested was \$34,751,000 in 2023, \$41,497,000 in 2022, and \$45,328,000 in 2021.

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Restricted Stock Units (RSUs)

The following table summarizes the Company's RSUs activity:

	Shares (in thousands)	Weighted-Average Grant Date Fair Value
Nonvested as of December 31, 2022	1,269	\$ 61.74
Granted	791	46.14
Vested	(521)	59.22
Forfeited or expired	(110)	59.20
Nonvested as of December 31, 2023	<u>1,429</u>	<u>\$ 54.22</u>

The fair value of RSUs was determined based on the observable market price of the Company's stock on the grant date less the present value of expected future dividends. The weighted-average grant-date fair value of RSUs granted was \$46.14 in 2023, \$58.06 in 2022, and \$87.03 in 2021. There were 521,000, 192,000, and 16,000 RSUs that vested in 2023, 2022, and 2021, respectively.

Tax obligations for vested RSUs are settled by withholding a portion of the shares prior to distribution to the shareholder. The total cash used by the Company to fund the tax payments was \$7,836,000 in 2023, \$2,406,000 in 2022, and \$568,000 in 2021. In connection with these vested RSUs, the tax benefit (expense) realized by the Company was \$(3,229,000) in 2023, \$(1,049,000) in 2022, and \$126,000 in 2021.

Performance Restricted Stock Units (PRSUs)

The following table summarizes the Company's PRSUs activity:

	Shares (in thousands)	Weighted-Average Grant Date Fair Value
Nonvested as of December 31, 2022	33	\$ 62.49
Granted	46	44.86
Vested	—	—
Forfeited or expired	—	—
Nonvested as of December 31, 2023	<u>79</u>	<u>\$ 52.23</u>

The fair value of PRSUs was calculated using a Monte Carlo simulation model to estimate the probability of satisfying the service and market conditions stipulated in the award grant. The weighted average grant-date fair value of PRSUs granted was \$44.86 in 2023 and \$62.49 in 2022. No PRSUs were granted in 2021. No PRSUs vested in 2023, 2022, and 2021.

Stock-Based Compensation Expense

The Company stratifies its employee population into three groups: one consisting of the CEO, another consisting of senior management, and another consisting of all other employees. The Company currently applies an estimated annual forfeiture rate of 0% to all stock-based awards for the CEO, 8% to all stock-based awards for senior management, and 13% for all other employees. Each year during the first quarter, the Company revises its forfeiture rate based on updated estimates of employee turnover. This resulted in a decrease to compensation expense of \$234,000 in 2023, an increase to compensation expense of \$1,536,000 in 2022, and a decrease to compensation expense of \$255,000 in 2021.

As of December 31, 2023, total unrecognized compensation expense, net of estimated forfeitures, related to non-vested stock-based awards, including stock options, RSUs, and PRSUs, was \$58,489,000, which is expected to be recognized over a weighted-average period of 1.92 years.

The total stock-based compensation expense and the related income tax benefit recognized was \$54,768,000 and \$8,442,000, respectively, in 2023, \$54,505,000 and \$9,540,000, respectively, in 2022, and \$43,774,000 and \$6,764,000, respectively, in 2021. No compensation expense was capitalized in 2023, 2022, or 2021.

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The following table presents the stock-based compensation expense by caption for each period presented on the Consolidated Statements of Operations (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Cost of revenue	\$ 1,979	\$ 2,016	\$ 1,345
Research, development, and engineering	16,480	17,693	13,535
Selling, general, and administrative	36,309	34,796	28,894
	<u>\$ 54,768</u>	<u>\$ 54,505</u>	<u>\$ 43,774</u>

NOTE 17: Employee Savings Plan

Under the Company's Employee Savings Plan, a defined contribution plan, all U.S. employees who have attained age 21 may contribute up to 100% of their pay on a pre-tax basis under the Company's Employee Savings Plan, subject to the annual dollar limitations established by the Internal Revenue Service ("IRS"). The Company matches 50% of the first 6% of pay an employee contributes. Company contributions vest 25%, 50%, 75%, and 100% after one, two, three, and four years of continuous employment with the Company, respectively. Company contributions totaled \$3,392,000 in 2023, \$3,284,000 in 2022, and \$2,898,000 in 2021. Cognex stock is not an investment alternative and Company contributions are not made in the form of Cognex stock.

NOTE 18: Income Taxes

Domestic income before taxes was \$16,039,000 in 2023, \$48,546,000 in 2022, and \$121,729,000 in 2021. Foreign income before taxes was \$119,309,000 in 2023, \$202,149,000 in 2022, and \$197,171,000 in 2021.

Income tax expense consisted of the following (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Current:			
Federal	\$ 29,084	\$ 48,355	\$ 27,870
State	3,544	5,689	5,372
Foreign	9,207	10,243	8,406
	<u>41,835</u>	<u>64,287</u>	<u>41,648</u>
Deferred:			
Federal	(24,731)	(40,772)	(19,266)
State	(5,877)	(8,354)	(769)
Foreign	10,887	20,009	17,406
	<u>(19,721)</u>	<u>(29,117)</u>	<u>(2,629)</u>
	<u>\$ 22,114</u>	<u>\$ 35,170</u>	<u>\$ 39,019</u>

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A reconciliation of the U.S. federal statutory corporate tax rate to the Company's income tax expense, or effective tax rate, was as follows:

	Year Ended December 31,		
	2023	2022	2021
Income tax expense at U.S. federal statutory corporate tax rate	21 %	21 %	21 %
State income taxes, net of federal benefit	1	2	1
Foreign tax rate differential	(6)	(7)	(5)
Tax credits	(3)	(1)	(2)
Taxation on multinational operations	(3)	—	—
Tax reserves	3	1	—
Limitation on deduction for executive compensation	2	1	—
Discrete tax expense related to employee stock-based compensation	1	—	(3)
Discrete tax expense related to tax return filings	2	2	(1)
Discrete tax expense related to rate revaluation on state tax assets	2	(2)	—
Discrete tax benefit related to GILTI adjustments	(2)	(3)	—
Discrete tax benefit for release of valuation allowance	(4)	(1)	—
Discrete tax benefit for audit settlements	—	(1)	—
Other	2	2	1
Income tax expense	<u>16 %</u>	<u>14 %</u>	<u>12 %</u>

Tax Reserves

The changes in gross amounts of unrecognized tax benefits, excluding interest and penalties, were as follows (in thousands):

Balance of reserve for income taxes as of December 31, 2020	\$	13,952
Reductions as a result of tax positions taken in prior periods		(280)
Additions as a result of tax positions taken in prior periods		100
Additions as a result of tax positions taken in the current period		525
Reductions as a result of the expiration of the applicable statutes of limitations		(485)
Balance of reserve for income taxes as of December 31, 2021		13,812
Reductions as a result of tax positions taken in prior periods		(119)
Additions as a result of tax positions taken in prior periods		2,850
Additions as a result of tax positions taken in the current period		505
Reductions relating to settlements with taxing authorities		(2,329)
Reductions as a result of the expiration of the applicable statutes of limitations		(1,072)
Balance of reserve for income taxes as of December 31, 2022		13,647
Reductions as a result of tax positions taken in prior periods		(242)
Additions as a result of tax positions taken in prior periods		12,556
Additions as a result of tax positions taken in the current period		1,877
Reductions relating to settlements with taxing authorities		(1,230)
Reductions as a result of the expiration of the applicable statutes of limitations		(894)
Balance of reserve for income taxes as of December 31, 2023	<u>\$</u>	<u>25,714</u>

The Company's reserve for income taxes, including gross interest and penalties, was \$29,053,000 as of December 31, 2023, of which \$26,685,000 was classified as a non-current liability and \$2,368,000 was classified as an offset to deferred tax assets. The Company's reserve for income taxes, including interest and penalties, was \$15,866,000 as of December 31, 2022, which was classified as a non-current liability. The amount of gross interest and penalties included in these balances was \$3,339,000 and \$2,219,000 as of December 31, 2023 and 2022, respectively. If the Company's tax positions were sustained or the statutes of limitations related to certain positions expired, these reserves would be released and income tax expense would be reduced in a future period. As a result of the

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expiration of certain statutes of limitations, there is a potential that a portion of these reserves could be released, which would decrease income tax expense by approximately \$650,000 to \$1,000,000 over the next twelve months.

The Company has defined its major tax jurisdictions as the United States, Ireland, China, Japan, and Korea and within the United States, Massachusetts. The statutory tax rate is 12.5% in Ireland, 25% in China, 34.6% in Japan, and 21% in Korea, compared to the U.S. federal statutory corporate tax rate of 21%. These differences resulted in a favorable impact to the effective tax rate of 6 percentage points for 2023, 7 percentage points for 2022, and 5 percentage points for 2021. Management has determined that earnings from its legal entity in China will be indefinitely reinvested to provide local funding for growth, and that earnings from all other jurisdictions will not be indefinitely reinvested. In 2023, the Company qualified for a tax holiday in China, which is renewed every three years. The tax effect of this benefit, derived from the tax holiday, on basic and diluted earnings per share for 2023 was not material.

Within the United States, the tax years 2019 through 2022 remain open to examination by the Internal Revenue Service ("IRS") and various state taxing authorities. The tax years 2017 through 2022 remain open to examination by various taxing authorities in other jurisdictions in which the Company operates. The Company is under audit by the Commonwealth of Massachusetts for the returns filed for tax years 2020 and 2021. In addition, the Company is under audit in Ireland for the returns filed for tax years 2019 through 2020. Management believes the Company is adequately reserved for these audits. The final determination of tax audits could result in favorable or unfavorable changes in our estimates. Any reserves associated with this audit period will not be released until the issue is settled or the audit is concluded.

Interest and penalties included in income tax expense were \$1,032,000 in 2023, \$229,000 in 2022, and \$281,000 in 2021.

Cash paid for income taxes totaled \$56,618,000 in 2023, \$57,016,000 in 2022, and \$49,435,000 in 2021.

Deferred Tax Assets and Liabilities

The tax effects of temporary differences and attributes that give rise to deferred income tax assets and liabilities as of December 31, 2023 and December 31, 2022 were as follows (in thousands):

	December 31,	
	2023	2022
Deferred tax assets:		
Intangible asset in connection with change in tax structure	\$ 375,360	\$ 386,221
Stock-based compensation expense	20,916	21,962
Tax credit carryforwards	7,848	8,284
Inventory and revenue related	10,897	8,117
Bonuses, commissions, and other compensation	6,243	5,116
Depreciation	1,840	4,881
Foreign net operating losses	339	53
Capitalization of R&D expenses	28,521	16,889
Other	5,514	15,102
Total deferred tax assets	457,478	466,625
Valuation allowance	(943)	(7,661)
	\$ 456,535	\$ 458,964
Deferred tax liabilities:		
Amortization	\$ (28,685)	\$ (2,762)
GILTI tax basis differences in connection with change in tax structure	(274,327)	(298,922)
	\$ (303,012)	\$ (301,684)
Net deferred taxes	\$ 153,523	\$ 157,280

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Change in Tax Structure and Global Intangible Low-Taxed Income Tax

In 2019, the Company made changes to its international tax structure due to legislation by the European Union regarding low tax structures that resulted in an intercompany sale of intellectual property. As a result, the Company recorded an associated deferred tax asset of \$437,500,000 in Ireland based on the fair value of the intellectual property that is being realized over fifteen years as future tax deductions. From a United States perspective, the sale was disregarded, and any future deductions claimed in Ireland are added back to taxable income as part of Global Intangible Low-Taxed Income ("GILTI") minimum tax. The Company recorded an associated deferred tax liability of \$350,000,000, representing the GILTI minimum tax related to the fair value of the intellectual property.

Other Deferred Tax Assets and Liabilities

As of December 31, 2022, the Company recorded a deferred tax asset resulting from the capitalization of research and development expenditures. Beginning in 2022, the Tax Cuts and Jobs Act eliminates the option to deduct research and development expenditures in the period incurred and requires taxpayers to capitalize and amortize such expenditures over five or fifteen years, as applicable, pursuant to Section 174 of the Internal Revenue Code.

As of December 31, 2023, the Company had foreign net operating loss carryforwards of \$1,720,000, state tax credit carryforwards of \$8,740,000 that will begin to expire for the 2031 tax return, and foreign tax credit carryforwards of \$943,000.

As of December 31, 2023, the Company had a valuation allowance for foreign tax credits of \$943,000 that was not considered to be realized. Should these credits be utilized in a future period, the reserve associated with these credits would be reversed in the period when it is determined that the credits can be utilized to offset future income tax liabilities.

As of December 31, 2023, the Company released the valuation allowance for state research and development tax credits of \$5,427,000, as these credits are expected to be utilized to offset future state income tax liabilities.

While the deferred tax assets, net of valuation allowance, are not assured of realization, management has evaluated the realizability of these deferred tax assets and has determined that it is more likely than not that these assets will be realized. In reaching this conclusion, we have evaluated certain relevant criteria including the Company's historical profitability, current projections of future profitability, and the lives of tax credits, net operating losses, and other carryforwards. Should the Company fail to generate sufficient pre-tax profits in future periods, we may be required to establish valuation allowances against these deferred tax assets, resulting in a charge to current operations in the period of determination.

NOTE 19: Weighted Average Shares

Weighted-average shares were calculated as follows (in thousands):

	Year Ended December 31,		
	2023	2022	2021
Basic weighted-average common shares outstanding	172,249	173,407	176,463
Effect of dilutive stock awards	1,150	1,462	3,453
Diluted weighted-average common and common-equivalent shares outstanding	173,399	174,869	179,916

Stock options to purchase 6,854,092, 4,715,104, and 497,504 shares of common stock, on a weighted-average basis, were outstanding in 2023, 2022, and 2021, respectively, but were not included in the calculation of dilutive net income per share because they were anti-dilutive. Restricted stock units totaling 365, 26,079, and 605 that will be settled in shares of common stock to the extent they vest, on a weighted-average basis, were outstanding in 2023, 2022, and 2021, respectively, but were not included in the calculation of dilutive net income per share because they were anti-dilutive. No PRSUs were excluded in the calculation of dilutive net income per share in 2023, 2022, and 2021 as PRSUs were not anti-dilutive on a weighted-average basis.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 20: Segment and Geographic Information

The Company operates in one segment, machine vision technology. The Company has a single, company-wide management team that administers operations as a whole rather than as discrete operating segments. The Company's chief operating decision maker is the chief executive officer, who makes decisions to allocate resources and assesses performance at the corporate level, without regard to geography, product line, or end market. The Company offers a variety of machine vision products that have similar economic characteristics and are distributed by the same sales channels to the same types of customers.

The following table summarizes information about geographic areas (in thousands):

	United States	Europe	Greater China	Other	Total
Year Ended December 31, 2023					
Revenue	\$ 288,324	\$ 220,665	\$ 164,115	\$ 164,443	\$ 837,547
Long-lived assets	62,946	17,005	17,028	15,958	\$ 112,937
Year Ended December 31, 2022					
Revenue	\$ 343,835	\$ 234,643	\$ 227,447	\$ 200,165	\$ 1,006,090
Long-lived assets	66,928	14,725	1,334	3,370	\$ 86,357
Year Ended December 31, 2021					
Revenue	\$ 393,690	\$ 247,744	\$ 200,135	\$ 195,529	\$ 1,037,098
Long-lived assets	63,141	16,982	960	3,705	\$ 84,788

Revenue is presented geographically based on the customer's country of domicile.

Revenue from a single customer accounted for 11% and 17% of total revenue in 2022 and 2021, respectively. Revenue from this customer was not greater than 10% of total revenue in 2023. Accounts receivable from this customer was not greater than 10% of total accounts receivable as of December 31, 2023 or December 31, 2022.

Revenue from a second customer accounted for 11% of total revenue in 2022. Revenue from this customer was not greater than 10% of total revenue in 2023 or 2021. Accounts receivable from this customer was not greater than 10% of total accounts receivable as of December 31, 2023 or December 31, 2022.

NOTE 21: Business Combinations

Moritex Corporation

On October 18, 2023, the Company acquired all the outstanding shares of Moritex Corporation (Moritex), a global provider of premium optical components based in Japan, for an enterprise value of ¥40 billion Japanese Yen, or approximately \$270 million U.S. Dollars based on the closing date foreign exchange rate.

The cash-free, debt-free enterprise value was adjusted by cash acquired, debt assumed, and final working capital balances to arrive at total consideration to be allocated to assets acquired and liabilities assumed of ¥44,376,245,000 (\$296,138,000 based on the closing date foreign exchange rate), of which ¥44,227,414,000 (\$295,144,000) was paid in cash on the closing date and ¥148,831,000 (\$994,000) is expected to be paid in the first quarter of 2024 as a final purchase price adjustment based on the closing balance sheet. The Company acquired cash balances totaling \$38,088,000 as part of this transaction, to arrive at a net cash outflow of \$257,056,000 on the closing date. There was no contingent consideration as part of this transaction.

Established in 1973, Moritex develops, manufactures, and sells high-end optical components, such as lenses and lighting, for industrial use. The acquisition of Moritex is expected to increase the Company's optical technology capabilities, which include our proprietary embedded liquid lenses and, more recently, computational lighting from our 2022 acquisition of SAC Sirius Advanced Cybernetics GmbH (described below). Vision technology relies on acquiring high-quality images to optimize the performance of machine vision tools. Historically, our customers have primarily used third-party lenses and lighting for image acquisition. We anticipate the portfolio of Moritex optical components will allow us to expand our served market to include high-end lenses and lighting and provide our customers with a more complete product offering by replacing third-party components with Cognex-manufactured optical components. Moritex also provides the Company with a more substantial presence in Japan, which is an important machine vision market where we believe we can increase our share through a stronger local presence.

This transaction was accounted for as a business combination. As of the date of this filing, the purchase price allocation is preliminary and may change during the one-year measurement period ending October 18, 2024 as new

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

information becomes available, particularly related to tax positions reflected as of the acquisition date. Identifiable assets acquired and liabilities assumed were recorded at their estimated fair values, which were valued using level 3 inputs, as of the acquisition date. Pro-forma information, as well as revenue and earnings from the date of the acquisition, are not presented because they are not material to the Company's consolidated financial statements. Transaction costs were approximately \$5,800,000 and were expensed as incurred as part of SG&A expenses on the Consolidated Statement of Operations.

The purchase price was allocated based on provisional amounts as follows (in thousands):

Cash and cash equivalents	\$	38,088
Accounts receivable		11,572
Inventories		22,788
Property, plant and equipment		19,876
Goodwill		145,047
Customer relationships		66,900
Completed technologies		32,300
Trademarks		850
Deferred income tax assets		4,516
Other assets		4,935
Accounts payable		(6,700)
Accrued expenses		(13,521)
Deferred income tax liabilities		(22,055)
Reserve for income taxes		(5,864)
Other liabilities		(2,594)
Purchase price	\$	<u>296,138</u>

The customer relationships, completed technologies, and trademarks are included in "Intangible assets" on the Consolidated Balance Sheet. The customer relationships are being amortized to SG&A expenses over fifteen years, the completed technologies are being amortized to cost of revenue over nine years, and the trademarks are being amortized to SG&A expenses over three years. None of the acquired goodwill is deductible for tax purposes.

SAC Sirius Advanced Cybernetics GmbH

On December 7, 2022, the Company acquired all of the outstanding shares of SAC Sirius Advanced Cybernetics GmbH ("SAC"), a leader in computational lighting technology based in Germany. The acquisition of SAC and its technology is expected to expand the Company's capabilities in defect detection, and accelerate its growth trajectory with electric vehicle battery manufacturers. The purchase price of the acquisition was not material to the Company's consolidated financial statements.

NOTE 22: Loss (Recovery) from Fire

On June 7, 2022, the Company's primary contract manufacturer experienced a fire at its plant in Indonesia. The fire destroyed a significant amount of Cognex-owned consigned inventories, as well as component inventories owned by the contract manufacturer that were designated for Cognex products. There was no significant damage to the Company's production equipment. Since the date of the fire, the Company has worked with the contract manufacturer to resume production, maintain standards of product quality, and replenish inventories destroyed by the fire. The Company has also been working to ramp up an additional contract manufacturer to further mitigate risk, diversify supply chain, and expand production capacity.

In 2022, the Company recorded a net loss related to the fire of \$20,779,000, consisting primarily of losses of inventories and other assets of \$48,339,000, partially offset by insurance proceeds received from the Company's insurance carrier of \$27,560,000. In 2023, the Company recorded recoveries related to the fire of \$8,000,000, consisting of \$2,500,000 for proceeds received from the Company's insurance carrier in relation to a business interruption claim and \$5,500,000 for proceeds received as part of a financial settlement for lost inventory and other losses incurred as a result of the fire. Management does not anticipate additional recoveries. These losses and recoveries are presented in the caption "Loss (recovery) from fire" on the Consolidated Statements of Operations.

COGNEX CORPORATION - NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 23: Restructuring Charges

In December 2022, following its acquisition of SAC Sirius Advanced Cybernetics GmbH (refer to Note 21), the Company completed restructuring activities to align the cost and operating structure of the acquired business with the Company's business strategy. The restructuring activities included a workforce reduction of 18 employees and the termination of certain operating lease contracts, and resulted in charges of \$1,657,000 in 2022. These charges are included in "Restructuring charges" on the Consolidated Statements of Operations.

The following table summarizes the restructuring charges for the year ended December 31, 2022 (in thousands):

	Amount	
One-time termination benefits	\$	1,584
Contract termination costs		73
	\$	1,657

The following table summarizes the activity in the Company's restructuring reserve, which is included in "Accrued expenses" on the Consolidated Balance Sheets (in thousands):

	One-time Termination Benefits	Contract Termination Costs	Total
Balance as of December 31, 2021	\$ —	\$ —	\$ —
Restructuring charges	1,584	73	1,657
Cash payments	(646)	—	(646)
Foreign exchange rate changes	26	2	28
Balance as of December 31, 2022	964	75	1,039
Cash payments	(973)	(75)	(1,048)
Foreign exchange rate changes	9	—	9
Balance as of December 31, 2023	\$ —	\$ —	\$ —

NOTE 24: Subsequent Events

On February 15, 2024, the Company's Board of Directors declared a cash dividend of \$0.075 per share. The dividend is payable March 14, 2024 to all shareholders of record as of the close of business on February 29, 2024.

COGNEX CORPORATION – SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Additions		Deductions	Other	Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts			
(In thousands)						
Allowance for Credit Losses on Accounts Receivable:						
2023	\$ 730	\$ 500	\$ —	\$ (645) (1)	\$ (2) (2)	\$ 583
2022	\$ 776	\$ 191	\$ —	\$ (237) (1)	\$ — (2)	\$ 730
2021	\$ 831	\$ —	\$ —	\$ (55) (1)	\$ — (2)	\$ 776
Reserve for Sales Returns:						
2023	\$ 1,518	\$ 500	\$ —	\$ — (1)	\$ — (2)	\$ 2,018
2022	\$ 1,518	\$ —	\$ —	\$ — (1)	\$ — (2)	\$ 1,518
2021	\$ 1,291	\$ —	\$ 227	\$ — (1)	\$ — (2)	\$ 1,518
Deferred Tax Valuation Allowance:						
2023	\$ 7,661	\$ —	\$ —	\$ (6,718)	\$ —	\$ 943
2022	\$ 8,188	\$ 2,234	\$ 3,889	\$ (6,650)	\$ —	\$ 7,661
2021	\$ 8,568	\$ 1,420	\$ —	\$ (1,800)	\$ —	\$ 8,188

- (1) Specific write-offs
- (2) Foreign currency exchange rate changes

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

There were no disagreements with accountants on accounting or financial disclosure during 2023 or 2022.

ITEM 9A: CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As required by Rules 13a-15 and 15d-15 of the Exchange Act, the Company has evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of its disclosure controls and procedures (as defined in such rules) as of the end of the period covered by this report. Based on such evaluation, except as described below relating to the acquisition of Moritex Corporation, the Chief Executive Officer and Chief Financial Officer concluded that such disclosure controls and procedures were effective as of that date.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Management has evaluated the effectiveness of the Company's internal control over financial reporting based on the framework in Internal Control – Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Except as described below relating to the acquisition of Moritex Corporation, based on our evaluation, management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2023.

The Company closed the acquisition of Moritex Corporation on October 18, 2023. The new acquisition's total assets and revenues constituted approximately 5% and 1%, respectively, of the Company's consolidated total assets and revenues as shown on our consolidated financial statements as of and for the year ended December 31, 2023. As the acquisition occurred during the fourth quarter of 2023, the Company excluded Moritex Corporation from the scope of the assessment of the effectiveness of the Company's internal control over financial reporting and, with respect to the portion of disclosure controls and procedures that are subsumed by internal control over financial reporting of Moritex Corporation, the Company's disclosure controls and procedures. This exclusion is in accordance with the general guidance issued by the Staff of the Securities and Exchange Commission that an assessment of a recently-acquired business may be omitted from the scope in the year of acquisition if specified conditions are satisfied.

Attestation Report of the Registered Public Accounting Firm on Internal Control over Financial Reporting

The Company's internal control over financial reporting as of December 31, 2023 has been audited by Grant Thornton LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

Except as described above, there have been no changes in the Company's internal control over financial reporting that occurred during the fourth quarter of the year ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. The Company continues to review its disclosure controls and procedures, including its internal control over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that the Company's systems evolve with its business.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Cognex Corporation

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Cognex Corporation (a Massachusetts corporation) and subsidiaries (the "Company") as of December 31, 2023, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2023, and our report dated February 15, 2024 expressed an unqualified opinion on those financial statements.

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 ("Management's Report"). 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.

Our audit of, and opinion on, the Company's internal control over financial reporting does not include the internal control over financial reporting of Moritex Corporation, a wholly-owned subsidiary, whose financial statements reflect total assets and revenues constituting five and one percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2023. As indicated in Management's Report, Moritex Corporation was acquired during 2023. Management's assertion on the effectiveness of the Company's internal control over financial reporting excluded internal control over financial reporting of Moritex Corporation.

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/ GRANT THORNTON LLP

Boston, Massachusetts

February 15, 2024

ITEM 9B: OTHER INFORMATION

During the quarter ended December 31, 2023, the following Section 16 officer adopted a Rule 10b5-1 trading arrangement, as defined in Item 408 of Regulation S-K, that is intended to satisfy the affirmative defense conditions of the Exchange Act Rule 10b5-1(c):

- On December 12, 2023, Joerg Kuechen, the Chief Technology Officer of the Company, adopted a trading arrangement for the sale of shares of the Company's common stock (a "Rule 10b5-1 Trading Plan"). Mr. Kuechen's Rule 10b5-1 Trading Plan, which has a term ending on December 6, 2024, provides for the exercise of vested stock options to acquire up to 202,556 shares of common stock and the sale of up to 215,818 shares of common stock pursuant to the terms of the plan.

During the quarter ended December 31, 2023, no 10b5-1 trading arrangements were modified or terminated, and no director or officer of the Company adopted or terminated a "non-Rule 10b5-1 trading arrangement," as defined in Item 408 of Regulation S-K.

ITEM 9C: DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not Applicable

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

Information with respect to Directors and Executive Officers of the Company and the other matters required by Item 10 shall be included in the Company's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 1, 2024 and is incorporated herein by reference.

The Company has adopted a Code of Business Conduct and Ethics covering all employees, which is available, free of charge, on the Company's website, www.cognex.com under "Company-Investor Information-Governance Documents". The Company intends to disclose on its website any amendments to or waivers of the Code of Business Conduct and Ethics on behalf of the Company's directors and executive officers that would otherwise be required to be disclosed under the rules of the SEC or The NASDAQ Stock Market LLC.

ITEM 11: EXECUTIVE COMPENSATION

Information with respect to executive compensation and the other matters required by Item 11 shall be included in the Company's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 1, 2024 and is incorporated herein by reference.

ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to security ownership and the other matters required by Item 12 shall be included in the Company's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 1, 2024 and is incorporated herein by reference.

The following table provides information as of December 31, 2023 regarding shares of common stock that may be issued under the Company's existing equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights, and vesting of restricted stock units	Weighted-average exercise price of outstanding options, restricted stock units, warrants, and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)		
Equity compensation plans approved by shareholders (3)	10,516,000 (1) \$	51.22	7,978,000 (2)
Equity compensation plans not approved by shareholders (3)	—	—	—
	<u>10,516,000</u>	<u>\$ 51.22</u>	<u>7,978,000</u>

- Includes shares to be issued upon exercise of outstanding options under the Company's 2023 Stock Option and Incentive Plan, the 2007 Stock Option and Incentive Plan, and subsequent to shareholder approval, the 2001 General Stock Option Plan, as amended and restated.
- Includes shares remaining available for future issuance under the Company's 2023 Stock Option and Incentive Plan. This amount is subject to adjustment from "Carryover Shares" as defined in Note 16: Stock-Based Compensation.
- All references made to share or per share amounts have been adjusted to reflect the two-for-one stock split which occurred in the fourth quarter of 2017.

The 2001 General Stock Option Plan was originally adopted by the Board of Directors in December 2001 without shareholder approval. In December 2011, this plan received shareholder approval for an amendment and restatement of the plan. This plan provided for the granting of nonqualified stock options and incentive stock options to any employee who was actively employed by the Company and was not an officer or director of the Company. The maximum number of shares of common stock that were available for grant under this plan was 38,440,000 shares. All option grants had an exercise price per share that was no less than the fair market value per share of the Company's common stock on the grant date and had a term that was no longer than ten years from the grant date. 32,544,411 stock options were granted under the 2001 General Stock Option Plan. With shareholder approval of the 2023 Stock Option and Incentive Plan in May 2023, no further shares may be granted from the 2001 General Stock Option Plan.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information with respect to certain relationships and related transactions and the other matters required by Item 13 shall be included in the Company's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 1, 2024 and is incorporated herein by reference.

ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES

Information with respect to principal accounting fees and services and the other matters required by Item 14 shall be included in the Company's definitive Proxy Statement for the Annual Meeting of Shareholders to be held on May 1, 2024 and is incorporated herein by reference.

PART IV

ITEM 15: EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) Financial Statements

The financial statements are included in Part II – Item 8 of this Annual Report on Form 10-K.

(2) Financial Statement Schedule

Financial Statement Schedule II is included in Part II – Item 8 of this Annual Report on Form 10-K.

Other schedules are omitted because of the absence of conditions under which they are required or because the required information is provided in the consolidated financial statements or notes thereto.

(3) Exhibits

The Exhibits filed as part of this Annual Report on Form 10-K are listed in the Exhibit Index, immediately preceding the signature page hereto.

ITEM 16: FORM 10-K SUMMARY

Not applicable

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on the 15th day of February 2024.

COGNEX CORPORATION

By: /s/ Robert J. Willett
Robert J. Willett
President and Chief Executive Officer

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Robert J. Willett</u> Robert J. Willett	President, Chief Executive Officer, and Director (principal executive officer)	February 15, 2024
<u>/s/ Paul D. Todgham</u> Paul D. Todgham	Senior Vice President of Finance and Chief Financial Officer (principal financial and accounting officer)	February 15, 2024
<u>/s/ Sachin Lawande</u> Sachin Lawande	Director	February 15, 2024
<u>/s/ John Lee</u> John Lee	Director	February 15, 2024
<u>/s/ Angelos Papadimitriou</u> Angelos Papadimitriou	Director	February 15, 2024
<u>/s/ Dianne Parrotte</u> Dianne Parrotte	Director	February 15, 2024
<u>/s/ Marjorie Sennett</u> Marjorie Sennett	Director	February 15, 2024
<u>/s/ Anthony Sun</u> Anthony Sun	Director	February 15, 2024

Shareholder Information

2023 COGNEX BOARD OF DIRECTORS

Anthony Sun

*Chairman, and Former Managing
General Partner, Venrock Associates*

Robert J. Willett

*President & Chief Executive Officer,
Cognex Corporation*

Sachin S. Lawande

*President & Chief Executive Officer,
Visteon Corporation*

Dr. John T.C. Lee

*President & Chief Executive Officer,
MKS Instruments, Inc.*

Dianne M. Parrotte

Independent Consultant

Marjorie T. Sennett

*Former Managing Director,
Farallon Capital Management, LLC*

Angelos Papadimitriou

Chairman, Athena Ventures

2023 COGNEX EXECUTIVE OFFICERS

Robert J. Willett

President & Chief Executive Officer

Sheila DiPalma

*Executive Vice President,
Employee Services*

Carl Gerst

*Executive Vice President,
Vision and ID Products*

Joerg Kuechen

*Senior Vice President,
Advanced Vision Technology
& Chief Technology Officer*

Paul Todgham

*Senior Vice President
& Chief Financial Officer*

CORPORATE HEADQUARTERS

Cognex Corporation
One Vision Drive
Natick, Massachusetts 01760
Telephone: (508) 650-3000
www.cognex.com

A copy of the Annual Report on Form 10-K filed with the Securities and Exchange Commission is available free of charge upon written request to Cognex Investor Relations at the address above, or via online request at www.cognex.com/investor.

FORWARD-LOOKING STATEMENTS

This report, including the CEO's letter, may contain "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934. For further information, please see the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report on Form 10-K filed with the SEC. A discussion regarding risks associated with forward-looking statements is included under the heading "Forward-Looking Statements." All information in this report is subject to change without notice.

Cognex, DataMan and In-Sight are registered trademarks and Edge Intelligence, In-Sight SnAPP and SnAPP are trademarks of Cognex.

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ALL IN GOOD FUN

For many years, Cognex's annual reports have parodied famous publications, pop culture icons, and current events to inject creativity into an otherwise boring annual report process. This annual report is not in any way affiliated with Harry Potter or the Hogwarts School of Witchcraft and Wizardry. Warner Bros. Entertainment Inc. owns the trademarks in the Harry Potter franchise and has not expressly authorized the use of its marks. And, although Cognex machine vision systems may seem to have been conjured from another world, there is nothing magical about them.

TRANSFER AGENT

Computershare
www.computershare.com/investor

OUTSIDE LEGAL COUNSEL

Goodwin Procter LLP
Boston, Massachusetts

INDEPENDENT AUDITORS

Grant Thornton LLP
Boston, Massachusetts

DESIGN

PointOne Marketing & Design
www.pointonemarketing.com

ORIGINAL PHOTOGRAPHY

David Shopper
www.davidshopper.com



This Annual Report is a parody.

Tom Riddle
666 Netherworld Lane
Warlock's Wood
S053 5PD
Scotland



Magic moments...



Cognoids bring creativity to everything they do, and Halloween is no exception! Cogwarts' all-day celebration of the holiday is a perfect example of how Cognoids take their work seriously, but never themselves.