2024 ANNUAL REPORT

COHERENT

United States
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

for the fiscal year ended June 30, 2024

☐ **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: 001-39375

COHERENT CORP.

(Exact name of registrant as specified in its charter)

Pennsylvania	**25-1214948**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
375 Saxonburg Blvd.	
Saxonburg, PA	**16056**
(Address of principal executive offices)	***(Zip code)***

Registrant's telephone number, including area code: 724-352-4455

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, no par value	**COHR**	**New York Stock Exchange**

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 Exchange 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 (§ 232.405 of this chapter) 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, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		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. ☒

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 outstanding common stock, no par value, held by non-affiliates of the Registrant at December 31, 2023, was approximately $6,559,717,307 based on the closing sale price reported on the Nasdaq Global Select Market. For purposes of this calculation only, directors and executive officers of the Registrant and their spouses are deemed to be affiliates of the Registrant.

Number of outstanding shares of common stock, no par value, at August 13, 2024, was 153,300,385.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement, which will be issued in connection with the 2024 Annual Meeting of Shareholders of Coherent Corp., are incorporated by reference into Part III of this Annual Report on Form 10-K.

Forward-Looking Statements

This Annual Report on Form 10-K (including certain information incorporated herein by reference) contains forward-looking statements made pursuant to Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 (the "PSLRA"). The statements in this Annual Report on Form 10-K that are not purely historical are forward-looking statements, including, without limitation, statements regarding our expectations, assumptions, beliefs, intentions or strategies regarding the future. In some cases, these forward-looking statements can be identified by terminology such as, "may," "will," "should," "expects," "plans," "anticipates," "believes," "intends," "estimates," "predicts," "projects," "potential," or "continue" or the negative of these terms or other comparable terminology. Forward-looking statements address, among other things, our assumptions, our expectations, our assessments of the size and growth rates of our markets, our growth strategies, our efforts to increase bookings, sales and revenues, projections of our future profitability, cash generation, success of our research, development and engineering investments, results of operations, capital expenditures, our financial condition, our ability to integrate acquired businesses or other "forward-looking" information and include statements about revenues, costs, investments, earnings, margins, or our projections, actions, plans or strategies.

The forward-looking statements in this Annual Report on Form 10-K involve risks and uncertainties, which could cause actual results, performance or trends to differ materially from those expressed in the forward-looking statements herein or in previous disclosures. We believe that all forward-looking statements made by us have a reasonable basis, but there can be no assurance that these expectations, beliefs or projections will actually occur or prove to be correct, at least on the timetable of our expectations. Actual results could differ materially. We claim the protection of the safe harbor for forward-looking statements contained in the PSLRA for our forward-looking statements.

The risk factors described in more detail herein under Item 1A. "Risk Factors" and summarized below under "Risk Factor Summary," among others, in some cases have affected and in the future could affect our financial performance and actual results, and could cause actual results for fiscal 2025 and beyond to differ materially from those expressed or implied in any forward-looking statements included in this Annual Report on Form 10-K or otherwise made by our management.

All such factors, as well as factors described or referred to in other filings we make with the Securities and Exchange Commission (the "SEC") from time to time, should be considered in evaluating our business and prospects. Many of these factors are beyond our reasonable control. In addition, we operate in a highly competitive and rapidly changing environment, and, therefore, new risk factors can arise and be present without market participants like us knowing until a substantial amount of time has passed. It is not possible for management to predict all such risk factors, assess the impact of all such risk factors on our business or estimate the extent to which any individual risk factor, or combination of risk factors, may impact our business. It is also not possible for management to mitigate all such risks, and therefore any such risk factor may cause results to differ materially from those contained in any forward-looking statement. The forward-looking statements included in this Annual Report on Form 10-K speak only as of the date of this Annual Report on Form 10-K. We do not assume any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or developments, or otherwise, except as may be required by the securities laws. We caution you not to rely on them unduly.

Coherent Corp. does communicate with securities analysts from time to time and those communications are conducted in accordance with applicable securities laws. Investors should not assume that Coherent Corp. agrees with any statement or report issued by any analyst, irrespective of the content of the statement or report.

Risk Factor Summary

The following is a summary of the material risks and uncertainties that could cause our business, financial condition or operating results to be adversely impacted. We encourage you to carefully review the full risk factors contained in Item 1A. "Risk Factors" herein in their entirety for additional information regarding these risks and uncertainties.

Risks Relating to Our Business and Our Industry

- Investments in future markets of potential significant growth may not result in the expected return.
- Our competitive position depends on our ability to develop new products and processes.
- Our products may contain defects that are not detected until deployed, which could increase our costs, reduce our revenues, cause us to lose key customers, or expose us to litigation related to our products.
- Our competitive position may require significant investments.
- We may be unable to successfully implement our acquisitions strategy or integrate acquired companies and personnel with existing operations.

- Although we expect that our acquisitions will result in cost savings, synergies, and other benefits, we may not realize those benefits, or be able to retain those benefits even if realized.
- Our future success depends on continued international sales, and our global operations are complex and present multiple challenges to manage.
- We are subject to complex and rapidly changing import and export regulations of the countries in which we operate and/or sell which could limit our sales and decrease our profitability, and we may be subject to legal and regulatory consequences if we do not comply with applicable export control laws and regulations.
- We may fail to accurately estimate the size and growth rate of our markets and our customers' demands.
- We may encounter increased competition, and we may fail to accurately estimate our competitors' or our customers' willingness and capability to backward integrate into our competencies and thereby displace us.
- A significant portion of our business may be subject to cyclical market factors.
- The long sales cycles for many of our products may cause us to incur significant expenses.
- We have entered into supply agreements that commit us to supply products on specified terms.
- We depend on highly complex manufacturing processes that require strategic materials, components, and products from limited sources of supply.
- We participate in the semiconductor capital equipment market, which requires significant research and development expenses to develop and maintain products, and a failure to achieve market acceptance for our products could have a significant negative impact on our business and results of operations.
- There are risks associated with our participation in the display capital equipment market, including there being a relatively limited number of end customer manufacturers.
- Increases in commodity prices and diminished availability of rare earth minerals and noble gases may adversely affect our results of operations and financial condition.
- Changes in trade policies, such as increased import duties, could increase the costs of goods imported into the United States or China.
- A widespread health crisis could materially and adversely affect our business, financial condition, and results of operations.
- Global economic downturns may adversely affect our business, operating results, and financial condition.
- Foreign currency risk may negatively affect our revenues, cost of sales, and operating margins, and could result in foreign exchange losses.
- Inflation and increased borrowing costs could impact our cash flows and profitability.
- Our current credit agreement and any other credit or similar agreements into which we may enter in the future may restrict our operations, particularly our ability to respond to changes or to take certain actions regarding our business.
- Any inability to access financial markets from time to time to raise required capital, finance our working capital requirements or our acquisition strategies, or otherwise support our liquidity needs could negatively impact our ability to finance our operations, meet certain obligations, or implement our growth strategy.
- There are limitations on the protection of our intellectual property, and we may from time to time be involved in costly intellectual property litigation or indemnification.
- Our global operations are subject to complex and rapidly changing legal and regulatory requirements.
- We may face particular data privacy and security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data.
- Cybersecurity attacks and incidents and other vulnerabilities could subject us to costly damages, claims and expenses, harm to our reputation or competitive position, or disrupt our operations and business.
- Data breaches and other events and incidents that impact the confidentiality, availability, and integration of information and assets could disrupt our operations, subject us to legal claims, and impact our financial results.
- We use and generate potentially hazardous substances that are subject to stringent environmental and safety regulations.
- We have a substantial amount of debt, which could adversely affect our business, financial condition, or results of operations and prevent us from fulfilling our debt-related obligations.
- The agreements that govern our senior credit facilities and our 5.000% senior notes due 2029 contain various covenants that impose restrictions on our business, which may affect our ability to operate our businesses.
- Unfavorable changes in tax rates, tax liabilities, or tax accounting rules could negatively affect future results.
- Natural disasters or other global or regional catastrophic events could disrupt our operations, give rise to substantial environmental hazards, and adversely affect our results.
- Delays in transportation of products and possible shortages of critical raw materials, parts, equipment and other resources may adversely affect our results of operations.
- Our success requires us to attract, retain, and develop key personnel and maintain good relations with our employees.
- We contract with a number of large end-user service providers and product companies that have considerable bargaining power, which may require us to agree to terms and conditions that could have an adverse effect on our business or ability to recognize revenues.
- The adoption of new climate change regulations may result in increased financial costs and/or losses.
- Some of our business units depend from time to time on large purchases from a few large customers, and any loss, cancellation, reduction, or delay in purchases by these large customers could harm the longevity of the business.
- Actions that we are taking to restructure our business in alignment with our strategic priorities may not be as effective as anticipated.
- We are subject to a number of risks associated with the equity investments contemplated by the respective investment agreements entered into with Denso Corporation and Mitsubishi Electric Corporation and certain related supply arrangements, and these risks could adversely impact our operations, financial condition and business.
- Our operations may be adversely affected if we are unable to manufacture certain products in our manufacturing facilities.

- Failure to accurately forecast our customer demands and our resulting revenues could result in additional charges for obsolete or excess inventories or noncancellable purchase commitments.
- Our markets are unpredictable and characterized by rapid technological changes and evolving standards demanding a significant investment in research and development, and, if we fail to address changing market conditions, our business and operating results will be harmed.
- If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.
- If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

Risks Relating to Our Capital Stock

- The trading prices for our common stock have been volatile in the past and may be volatile in the future.
- Provisions in our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws and the Pennsylvania Associations Code (the "Code") may delay or prevent our acquisition by a third party, which could also reduce the market price of our capital stock.
- We do not currently intend to pay dividends on our common stock; holders will benefit from an investment in our common stock only if it appreciates in value.
- Our ability to declare and pay dividends on our capital stock may be limited, including by the terms of our existing Credit Agreement.
- Our common stock is subordinate to our existing and future indebtedness, the Series B Preferred Stock, and any other preferred stock we may issue in the future. Our Series B Preferred Stock ranks junior to all of our and our subsidiaries' consolidated liabilities.
- Our Board of Directors can issue, without approval of the holders of our common stock, preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of our common stock, the rights of holders of shares of our capital stock, or the market price of our capital stock.
- The redemption rights of the holders of Series B Preferred Stock may result in the use of our cash in such a way that could adversely affect our business, financial condition or results of operations.
- Holders of our Series B Preferred Stock can exercise significant control over us, which could limit the ability of holders of our other capital stock to influence the outcome of key transactions, including a change of control.
- Reports published by securities or industry analysts, freelance bloggers and credit rating agencies, including projections in those reports that exceed our actual results, could adversely affect our share price and trading volume.
- We depend on our subsidiaries for cash to fund our operations and expenses, including future dividend payments with respect to our outstanding preferred stock.

PART I

Item 1. BUSINESS

Definitions

Coherent Corp. ("Coherent," the "Company," "we," "us," or "our"), a global leader in materials, networking, and lasers, is a vertically integrated manufacturing company that develops, manufactures, and markets engineered materials, optoelectronic components and devices, and lasers for use in the industrial, communications, electronics, and instrumentation markets. Our headquarters are located at 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056, USA. Our telephone number is +1-724-352-4455. Reference to "Coherent," the "Company," "we," "us," or "our" in this Annual Report on Form 10-K, unless the context requires otherwise, refers to Coherent Corp. and its wholly owned subsidiaries.

The following defined terms are used in this Annual Report on Form 10-K: artificial intelligence (AI); bismuth telluride (Bi_2Te_3); cadmium telluride (CdTe); carbon dioxide (CO_2); chemical vapor deposition (CVD) of materials including diamond; continuous wave (CW); datacenter interconnect (DCI); dense wavelength division multiplexing (DWDM); diversity, equity, and inclusion (DEI); edge-emitting lasers (EELs); environmental, social, and governance (ESG); extreme-ultraviolet (EUV) lithography; fifth-generation (5G) wireless; fourth-generation (4G) wireless; gallium arsenide (GaAs); gallium antimonide (GaSb), gallium nitride (GaN); Geostationary Operational Environment Satellite Program (GOES); gigabit per second (Gbps); high-definition multimedia interface (HDMI); high-electron-mobility transistor (HEMT); indium phosphide (InP); infrared (IR); integrated circuit (IC); intellectual property (IP); kilowatt (kW); light detection and ranging (LiDAR); liquid crystal (LC); liquid crystal on silicon (LCoS); machine learning (ML); metal-oxide-semiconductor field-effect transistor (MOSFET); millimeters (mm); nanometers (nm); near-infrared (NIR); optical channel monitor (OCM); optoelectronic chip hybrid integration platform (OCHIP); original equipment manufacturer (OEM); optical time-domain reflectometer (OTDR); radio frequency (RF); reconfigurable optical add/drop multiplexer (ROADM); research and development (R&D); silicon carbide (SiC); terabit per second (Tbps); three-dimensional (3D); ultraviolet (UV); vertical-cavity surface-emitting laser (VCSEL); virtual reality (VR); wavelength selective switching (WSS); zinc selenide (ZnSe); and zinc sulfide (ZnS).

General Description of Business

We develop, manufacture, and market engineered materials, optoelectronic components and devices, and optical and laser systems and subsystems for use in the industrial, communications, electronics, and instrumentation markets. We use advanced engineered materials growth technologies and proprietary high-precision fabrication, microassembly, optical thin-film coating, and electronic integration to manufacture complex optoelectronic devices and modules. Our products are deployed in a variety of market verticals, including precision manufacturing, aerospace & defense, semiconductor capital equipment, display capital equipment, telecommunication (telecom) networks, data communication (datacom) networks, consumer electronics, automotive, wireless, life sciences, and scientific research.

We generate almost all of our revenues, earnings, and cash flows from developing, manufacturing, and marketing a broad portfolio of products and services for our end markets. We also generate revenues, earnings, and cash flows from externally funded R&D contracts relating to the development and manufacture of new technologies, materials, and products. Our customer base includes original equipment manufacturers, laser end users, system integrators of high-power lasers, and manufacturers of equipment and devices for our end markets.

Through R&D investments and our strategic acquisitions, we have expanded our portfolio of materials and product platforms. We have a strong core competency in bulk and epitaxial crystal growth. The materials we grow and fabricate are differentiated by one or a combination of unique optical, electrical, magnetic, thermal, and mechanical properties.

Our optics are shaped by precision surfacing techniques and functionalized with smooth or structured surfaces or patterned metallization. Proprietary processes developed at our global optical coating centers differentiate our products' durability against high-energy lasers and extreme operating environments. Optical coatings also provide the desired spectral characteristics, ranging from the ultraviolet to the far-infrared. We leverage these capabilities to deliver miniature to large-scale precision optical assemblies, including those in combination with thermal-management components, integrated electronics, and software.

We also offer a broad portfolio of compound semiconductor lasers that are used in a variety of applications in our end markets. These lasers enable optical signal transmission, reception, and amplification in terrestrial and submarine communications networks, high-bit-rate server connectivity between and within datacenters, optical communications network monitoring, materials processing, fast and accurate measurements in biomedical instruments, and precision sensing in consumer electronics. We are a major supplier of silicon carbide substrates for the power electronics and the wireless mobile markets.

We continue to improve our operational capabilities, develop next-generation products, and invest in new technology platforms to drive growth in the short and the long term. With our strategic focus on fast-growing and sustainable markets, we pursue our mission of enabling the world to be safer, healthier, closer, and more efficient, and strive to attain our vision of a world transformed through innovations vital to a better life today and the sustainability of future generations.

Acquisition and Background of Coherent, Inc.

The acquisition of Coherent, Inc., one of the world's leading providers of laser and optics-based product solutions, closed on July 1, 2022. Coherent, Inc., as used in this Form 10-K generally means the subsidiaries and businesses of Coherent, Inc., as of the time of its acquisition by Coherent Corp. (formerly named II-VI Incorporated). For the full fiscal year 2023, Coherent, Inc., was included in the combined company and renamed as the Lasers segment. The Lasers segment's lasers and optics products serve industrial customers in semiconductor and display capital equipment, precision manufacturing, and aerospace & defense, as well as instrumentation customers in life sciences and scientific devices.

Information Regarding Reporting Segments and Foreign Operations

In connection with the acquisition of Coherent, Inc., effective July 1, 2022, the Company realigned its organizational structure into three reporting segments for the purpose of making operational decisions and assessing financial performance: (i) Networking, previously referred to as our Photonic Solutions segment; (ii) Materials, previously referred to as our Compound Semiconductors segment; and (iii) Lasers. Effective July 1, 2022, the Company reports financial information for these three segments.

Financial data regarding our revenues, results of operations, reporting segments, and international sales for the three years ended June 30, 2024, are set forth in the Consolidated Statements of Earnings (Loss) and in Note 14. Segment and Geographic Reporting to our Consolidated Financial Statements, which are included in Item 8 of this Annual Report on Form 10-K, and are incorporated herein by reference. We also discuss certain Risk Factors set forth in Item 1A – Risk Factors of this Annual Report on Form 10-K related to our foreign operations, which are incorporated herein by reference.

Backlog

We define our backlog as bookings that have not been converted to revenues by the end of the reporting period. As of June 30, 2024, our backlog was approximately $2.6 billion, compared with approximately $2.7 billion as of June 30, 2023.

Global Operations

Coherent is headquartered in Saxonburg, Pennsylvania, USA, with R&D, manufacturing, and sales facilities worldwide. Our U.S. production and R&D operations are located in California, Colorado, Connecticut, Delaware, Florida, Illinois, Massachusetts, Michigan, Mississippi, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas, and our non-U.S. production and R&D operations are based in Australia, China, Finland, Germany, India, Malaysia, the Philippines, Singapore, South Korea, Spain, Sweden, Switzerland, Thailand, the United Kingdom, and Vietnam. We also utilize contract manufacturers and strategic suppliers. In addition to sales offices co-located at most of our manufacturing sites, we have sales and marketing subsidiaries in Belgium, Canada, China, France, Germany, Israel, Italy, Japan, the Netherlands, South Korea, Spain, Switzerland, Taiwan, and the United Kingdom.

Human Capital

Our core values are Integrity, Collaboration, Accountability, Respect, and Enthusiasm, which we refer to by the acronym I CARE. These values define who we are and serve as a guide in how we engage with each other, our customers, our suppliers, our investors, and our environment. They serve as a model for how we grow the Company in an ethical, scalable, and sustainable manner.

- *Our People*. Our workplace is defined by our people. It enables everyone to come to work authentically as their "best selves." This includes supporting an inclusive environment in which every individual is considered a valuable member of the team. We listen to the voice of the employee and foster open communication through focus groups, personal interviews, an open-door policy, and engagement surveys, among other methods. This rich feedback allows us to reflect and adjust our internal initiatives across the globe to create a culture that recognizes employees' contributions and values their opinions. As a result, our human capital strategies are core to the long-term sustainability and success of the Company.

As of June 30, 2024, the Company employed approximately 26,000 employees worldwide.

	Number of employees	Percent of total
Manufacturing	21,645	83%
Research and development	2,268	9%
Sales, general and administrative	2,244	8%
Total:	**26,157**	**100%**

We believe that our efforts in managing our workforce have been effective, as evidenced by a strong culture and a good relationship between the Company and our employees.

- *Occupational Health and Safety*. It is our highest priority to keep our employees, customers, and suppliers safe, as the health and safety of our workforce is paramount to the success of our business. We provide our employees upfront and ongoing training to ensure that safety policies and procedures are effectively communicated and implemented. We have experienced employees on-site at each of our manufacturing locations who are tasked with environmental, health, and safety education and compliance. We customize our policies to the local requirements and circumstances of each plant.

- *Talent Acquisition, Development, and Training*. Hiring talented individuals and continuing to develop them are critical to our operations, and we are focused on creating experiences and programs that foster growth and performance. Our Talent Acquisition teams continue their outreach efforts to engage and attract diverse, high-quality talent to our organization. We have a robust succession-planning process that identifies internal candidates for development. We provide all employees the chance to learn and develop critical skills, and we strive to attract, motivate, and retain our talent. Our Leadership Academy offers global development programs for our people leaders to enhance their capabilities. Tuition reimbursement and funding for growth and development are also built into the annual budget to ensure that Coherent has the skilled workforce we need. Our global internship programs also welcome a new talent pipeline.

- *Total Rewards.* Our Total Rewards offerings are designed to:

  - Provide a market-competitive total rewards package that attracts, motivates, rewards, and retains top talent
  - Align total rewards offerings with our competitors with which we compete for talent
  - Increase transparency of rewards programs, including sharing company and/or business segment financial metrics, and measure achievements to challenging objectives
  - Balance fixed costs (benefits and base pay) and variable costs (bonus and equity)
  - Provide pay for performance, linked to company and individual performance
  - Ensure strong governance practices, and
  - Align with the interests of our shareholders

  Eligible employees may participate in the Employee Stock Purchase Plan (ESPP), providing the opportunity to share in the potential growth of our company stock and allowing employees to purchase company shares at a discount. Select employees are eligible to receive equity-based awards, to align employee and shareholder interests. In addition to offering competitive and fair compensation, we also offer a compelling suite of benefits, including comprehensive health benefits, competitive time off programs, and employee assistance programs.

- *Diversity and Inclusion*. Coherent respects and upholds the universal values of human rights, which are fundamental to every individual. We hold an expectation for all leaders and employees to engage with one another in a manner that is dignified, fair, and respectful. As we continue on our diversity, equity, and inclusion journey, the following initiatives took place in fiscal year 2024 in support of our global DEI strategy:

  - ***Fostering Inclusion and Belonging****:* Following the deployment of our global DEI program's strategy and objectives, over 13,500 employees have completed our Foundations of DEI training globally. This course was intended to set the foundation of awareness and understanding on the foundational concepts of DEI in our workplace. Our plan is to continue to deploy additional learning opportunities on DEI topics that help us foster an inclusive environment, bring awareness to unconscious bias, and ensure we are employing inclusive hiring practices.

  - ***Elevating Equity and Increasing Representation****:* Building on our success, we offered our global Women in Leadership Program again this year, with active participation from senior leadership, to bolster female representation in leadership roles. This program offers a comprehensive suite of development opportunities, including specialized skill enhancement, coaching from senior leaders, and networking opportunities across the organization, all aimed at helping support and propel the careers of women within our organization.

    - ***Embrace Diverse Perspectives****:* We continue to identify ways to highlight different perspectives through education. In fiscal year 2024, we offered a culture awareness course to employees who work on global teams to learn more about the different ways cultures communicate, collaborate, negotiate, and address disagreements. We also continue to offer diversity awareness topics throughout the year to educate employees on different dimensions of diversity present in our workforce.
    - ***Expand Our Impact***: Understanding the significant impact we can make, Coherent continues to support initiatives targeted to increase diversity, equity, and inclusion as well as education in STEM, entrepreneurship, innovation, and advanced technology through our partnerships. Our organization also continues to actively partner with CEO Action for Diversity & Inclusion to advance DEI in the workplace. In fiscal year 2024, Chief Strategy Officer and President of our Materials Segment, Giovanni Barbarossa, and Chief Marketing Officer, Sanjai Parthasarathi, served as mentors in the CEO Action Mentoring Initiative. This program pairs C-suite leaders with mentees from underrepresented and diverse populations working at the director and vice president levels to take part in a range of professional development activities focused on accelerating the development of diverse senior leaders through mentoring circles.

- Globally, approximately 45% of the workforce is female, with 11,890 females, 14,166 males and 101 undisclosed as of June 30, 2024. In Coherent's Global Leadership Team ("GLT"), which consists of directors and above, there are 65 females, 487 males, and 1 undisclosed. The GLT meets quarterly to discuss strategy, business trends, company operations, financials, and people programs. Our global footprint is diverse, with approximately 18,078 employees in the Asia-Pacific region, 3,690 in Europe, and 4,389 in the Americas.

Manufacturing Processes

Our success in developing and manufacturing many of our products depends on our ability to tailor the optical and physical properties of technically challenging materials, components, and photonics-based solutions across a broad array of industries. The ability to produce, process, and refine these complex materials, and to control their quality and in-process yields, is an expertise of the Company that is critical to our customers. In the markets we serve, there is a limited number of high-quality suppliers of many of the components we manufacture. Aside from datacenter transceivers, there are very few industry-standard products. Our lasers are displacing conventional technologies because they can do the job faster, yield higher quality, provide overall economic benefits, and enable next-generation applications.

Our network of worldwide manufacturing sites allows us to manufacture our products in regions that provide cost-effective and risk-management advantages. We employ numerous advanced manufacturing technologies and systems at our manufacturing facilities. These include metal-organic chemical vapor deposition and molecular beam epitaxy reactors, automated computer numeric control optical fabrication, high-throughput thin-film coaters, nanoprecision metrology, and custom-engineered automated furnace controls for crystal growth processes. We provide lasers in the form of gas, semiconductor, solid-state crystal, or fiber, which can also be classified by their output wavelength: ultraviolet, visible, infrared, or wavelength-tunable. There are also many options in terms of pulsed output versus continuous wave, pulse duration, output power, beam dimensions, etc., that are application-specific. Developing products for use across the electromagnetic spectrum requires the ability to repeatedly manufacture components with high yields to atomic tolerances. We continually update our comprehensive quality management systems that feature manufacturing best practices. We are committed to delivering products within specification, on time, and with high quality, with a goal of fully satisfying customers and continually improving.

The Use of Renewable Energy

We continue to increase our use of renewable energy to power our operations and lower our greenhouse gas footprint. As of April 2024, the Company is now obtaining approximately 70% of its global electricity needs from renewable energy sources. In total, this represents over 500 million kWh of renewable energy per year, thereby avoiding more than 250,000 metric tons of CO_2 emissions annually. We have on-site solar systems at several facilities that further contribute to our renewable energy efforts. We participate in Apple's Supplier Clean Energy Program, and all of our Apple production is powered by 100% renewable electricity sources. Our team also works to minimize energy usage, water usage, other raw materials usage, and waste generation.

Coherent has set as a top priority to reduce its carbon footprint across its global operations. In December 2023, the Company announced a commitment to achieve net-zero Scope 1 and Scope 2 emissions by fiscal year 2040. Continuing to increase the use of renewable electricity is an important lever to achieve that commitment. Additional information on the Company's sustainability performance can be found on the ESG section of our website at www.coherent.com. The website address is intended to be an inactive textual reference only. None of the information on, or accessible through, Coherent's website is part of this Annual Report on Form 10-K, nor is it incorporated herein by reference.

Sources of Supply

In our production processes, we use numerous optical, electrical, and mechanical parts that are sourced from third-party suppliers. These include integrated circuits, digital signal processors, mechanical housings, and optical components, and we commonly refer to them as raw materials. Raw materials or subcomponents required in the manufacturing process are generally available from several sources. However, in the Lasers segment, we currently purchase several key components and materials used in the manufacture of our products, including exotic materials, crystals, and optics, from sole-source or limited-source suppliers. We also purchase assemblies and turnkey solutions from contract manufacturers, based on our proprietary designs. We rely on our own production and design capability to manufacture and specify certain strategic components, crystals, fibers, semiconductor lasers, and laser-based systems.

The continued high quality of and access to these raw materials are critical to the stability and predictability of our manufacturing yields. We specify and test these raw materials at the onset of and throughout the production process. Additional research and capital investment are sometimes needed to better define future raw materials specifications. We continue to develop strategic second sources as part of our overall business continuity planning, and occasionally experience problems associated with raw materials not meeting contract specifications for quality or purity. Risks associated with reliance on third parties for the timely and reliable delivery of raw materials are discussed in greater detail in Item 1A. Risk Factors of this Annual Report on Form 10-K.

Reporting Segments and Business Units

The Company reports its results in three reporting segments: (i) Networking, (ii) Materials, and (iii) Lasers.

The Networking segment leverages Coherent's compound semiconductor technology platforms and deep knowledge of end-user applications for its key end markets to deliver differentiated components and subsystems.

The Materials segment is a market leader in engineered materials and optoelectronic devices, such as those based on ZnSe, ZnS, GaAs, InP, GaSb, and SiC.

The Lasers segment's lasers and optics products serve industrial customers in semiconductor and display capital equipment, precision manufacturing, and aerospace & defense, as well as instrumentation customers in life sciences and scientific instrumentation.

Coherent's segments are organized by business unit. Each of these business units develops and markets products as described below.

Networking	
Business Unit	**Our Products**
Telecommunications	• Products and solutions that enable high-bit-rate interconnects for communications and cloud service providers, including in terrestrial and undersea fiber-optic transmission
Datacom Transceivers	• Pluggable transceivers for Ethernet and Fibre Channel applications in cloud, hyperscale, and enterprise datacenter applications, including AI/ML
Advanced Optics	• Fiber optics and precision optics used in projection displays; crystal materials and components for optical communications; high-power UV, visible, and NIR optics for industrial lasers; filters and assemblies for life sciences as well as for sensors, instrumentation, and semiconductor equipment

Materials	
Business Unit	**Our Products**
Engineered Materials & Laser Optics	• Laser optics and accessories for CO_2 lasers • High-power fiber and direct-diode laser optics • Infrared thermal imaging optics and assemblies • Polycrystalline materials production including ZnSe, ZnS, and CVD diamond • Thermoelectric components, subassemblies, and systems • Specialty refining, recycling, and materials-recovery services for high-purity rare metals such as selenium and tellurium, as well as related chemical products such as tellurium dioxide • Advanced ceramic and metal-matrix composite products
Laser Devices & Systems	• High-power semiconductor lasers and laser bars • Laser heads and modules, Q-switched laser modules, high-power uncooled pump laser modules, laser systems for superhard materials processing • Laser processing heads and beam delivery systems for laser materials processing with industrial lasers • High-power fiber lasers for materials processing • EELs, VCSELs, and detectors • High-power pumps for amplifiers • Precision optical assemblies, infrared optics, thin-film coatings, and optical materials • Optical solutions for critical and complex design, engineering, and production challenges in aerospace & defense
Wide-Bandgap Electronics	• SiC and semiconductor materials for high-frequency and high-power electronic devices
Optoelectronic Devices & Modules	• VCSELs for sensing • EELs and detectors • Integrated circuits for transceivers

Lasers	
Business Unit	**Our Products**
Excimer Lasers	• High-pulse-energy UV gas and solid-state lasers from 193 nm to 355 nm • Advanced UV optical systems, line beams, and mask-based imaging systems
Solid-State Lasers - North America	• Ultrafast lasers from UV to IR wavelengths • High-pulse-energy UV nanosecond lasers • Low-power continuous-wave lasers and systems • Miniature low-power continuous-wave lasers and systems • High-power ultrafast amplifiers • Continuous-wave UV gas lasers
Solid-State Lasers - Europe	• Ultrafast lasers from UV to IR wavelengths • High-pulse-energy UV nanosecond lasers • Miniature low-power continuous-wave lasers and systems
Laser Systems	• Subsystems incorporating various lasers, optics, beam manipulation, monitoring, and control electronics • Standard systems incorporating standard subsystems in a complete mechanical housing, sold to the end user
CO_2 Lasers	• Kilowatt-class continuous-wave gas IR lasers • 50 W to 1 kW continuous-wave and pulse gas IR lasers
Aerospace & Defense	• Specialty polishing and coating of optics, optical systems, and assemblies requiring high complexity and precision at dimensions of up to 2 meters • Specialty lasers, laser systems, crystals, and diode lasers

Markets

Our market-focused businesses are currently organized by technologies and products and report based on the following markets: industrial, communications, electronics, and instrumentation.

Industrial Market Group

- *Precision Manufacturing Market Vertical.* Our Precision Manufacturing vertical encompasses a broad range of applications across very diverse markets. With complete verticality, from materials to turnkey laser solutions, we intersect with any industrial laser process within the application areas of automotive manufacturing, medical device manufacturing, machine tools, consumer goods, and industrial electrical and electronics. Coherent laser optics and solutions for the industrial market remain well-positioned: our portfolio enables a wide variety of applications including EV battery welding, fine processing of medical devices, additive manufacturing, high-temperature superconducting wires and tapes, and even bleaching of jeans. Our vertically integrated and market-leading ZnSe optics and components, due to their inherent low loss at around the 10-micron wavelength, have enabled high-power CO_2 laser systems for many decades and remain critical as replacement optics for the large installed base of CO_2 lasers. We continue to introduce products that address new and growing applications for low-power CO_2 lasers, such as drilling and cutting plastics, textiles, leather, wood, and other organic materials, for which the CO_2 laser's 10-micron wavelength is ideally suited.

  Fiber lasers that operate at about the 1-micron wavelength in pulsed or continuous mode have taken a central role in many industrial applications, especially for cutting, welding and marking of both metals and plastics. We supply a broad range of materials, and components that enable many functions within these fiber lasers, from the laser chips that generate the input optical power to the beam delivery systems that direct the output optical power to the target. The same set of Coherent products is at the core of existing and emerging direct-diode laser systems. Coherent's broad portfolio of coated optics and crystal materials serves all of the mentioned growing laser markets.

- *Aerospace & Defense Market Vertical.* Coherent's Aerospace & Defense solutions enable mission-critical capabilities for applications in high-energy lasers; contested space; and intelligence, surveillance, and reconnaissance. From uniquely grown single crystals and advanced ceramics, to completely engineered gimbal subsystems, Coherent solutions are embedded on nearly every platform in the field as well as on those under development. Coherent laser beam combining and advanced lightweight gimbal technologies, along with domestically produced high-power fiber laser pumps and amplifiers, are enabling next-generation high-energy laser systems and space-based laser communications applications. With the addition of nanomachined single-crystal silicon and grating technologies, together with Coherent's advanced coating capabilities, we enable advanced spectral beam combining and novel microstructured surface capabilities, which are highly valued within the Aerospace & Defense industry.

  Our advanced missile warning, electro-optical targeting, and imaging systems are deployed on virtually every U.S. fixed-wing and rotary platform. Our advanced sapphire, germanium, and multispectral domes provide unique protection to our advanced imaging, seeker, and laser solutions that are packaged behind them. The domes provide hemispherical coverage for airborne, naval, and ground-based systems.

  Our solutions for the Lunar Reconnaissance Orbiter (LRO) provided the first images proving that the astronauts' footprints on the moon are still there. The LRO continues to orbit the moon and provide rich information for future lunar landing sites. The LRO camera and its more advanced derivatives are the basis for many advanced space imaging applications being pursued by our customers. Our advanced imaging lenses and windows ensure that our customers' vehicles are able to safely and accurately dock with the Space Station. Our advanced telescope solution for the Geostationary Lightning Mapper enables the GOES satellites to detect early lightning strikes and predict tornados a full 20 minutes before previous technology. It forms the basis for many of our customers' advanced multispectral imaging solutions.

  Coherent's Aerospace & Defense division maintains separate business development, IT infrastructure, accounting, finance, engineering, and manufacturing facilities in the United States with strictly controlled access; they are dedicated to our U.S. government-supported contracts.

- *Semiconductor Capital Equipment Market Vertical.* The Semiconductor Capital Equipment vertical breaks out into what is called front-end-of-line (FEOL) and back-end-of-line (BEOL); Coherent is well positioned to capitalize on the growth in both FEOL and BEOL products. Semiconductor capital equipment requires advanced materials to meet the need for tighter tolerances, enhanced thermal stability, faster wafer transfer speeds, and reduced stage settling times. Our metal-matrix composites and reaction-bonded ceramics enable these applications, thanks to their optimum combination of light weight, strength, hardness, and coefficient of thermal expansion. Our reaction-bonded SiC materials are used to manufacture wafer chucks, lightweight scanning stages, and high-temperature corrosion-resistant wafer support systems. Our cooled SiC mirrors and precision patterned reticles are used in the illumination systems of lithography tools. Our large-area polycrystalline diamond windows enable CO_2 laser systems for EUV lithography.

  Our products enable legacy deep-UV lithography equipment that is widely deployed in semiconductor fabs. In the rapidly accelerating market of extreme-UV lithography systems, CO_2 lasers are used to generate extreme-ultraviolet light. These CO_2 lasers and beam delivery systems leverage our broad portfolio of CO_2 laser optics, CdTe modulators, and high-power damage-resistant polycrystalline CVD diamond windows to route the powerful laser beam to a tin droplet from which EUV light will emanate. Due to its very high mechanical and thermal performance characteristics, our reaction-bonded SiC is used in structural support systems that are integral to EUV lithography optics to meet critical requirements for optical system stability.

  Coherent lasers are widely used in both front-end and back-end applications. Our front-end laser products encompass solid-state lasers and excimer lasers designed for semiconductor inspection tasks along with CO_2 lasers tailored for wafer annealing, supporting the most advanced processing nodes. We also offer a suite of lasers for a variety of advanced packaging (back-end) applications, ranging from cutting, PCB and substrate drilling, and optical debonding to numerous laser marking tasks. Beyond lasers, we have decades of experience and expertise in ceramics and metal-matrix composites that semiconductor equipment manufacturers depend on to achieve state-of-the-art semiconductor manufacturing throughput, enabled by the exceptional mechanical and thermal properties of these materials.

- *Display Capital Equipment Market Vertical.* We have achieved breakthrough laser innovations essential to manufacture displays for phones, tablets, computers, and televisions. Our excimer laser solutions can improve precision, combining high-spatial precision and selectivity for advanced display production; increase productivity, offering fast, large-area processing for current and future-generation modules and panels; and maximize yield and maintain it along the process chain from backplane to individual display. The majority of OLED phones have flexible OLED displays; thus, a laser lift-off process is also required. These large panels then need to be cut into smaller panels before being cut into typical smartphone shapes, which is done by our CO_2 lasers. State-of-the-art mobile phones strive to guarantee a larger active area; accordingly, cuts must be precise and damage-free. UV ultrashort-pulsed lasers are therefore the preferred choice, and here again we offer an optimized portfolio of pico- and femtosecond laser sources. Beyond OLED, we are offering UV and DUV laser solutions for a broad range of applications to manufacture next-generation microLED displays. For display manufacturing, we offer a broad portfolio of laser sources and optical systems that will meet the requirements of display customers now, next, and beyond.

Communications Market Group

- *Telecom Market Vertical.* Coherent's optical communications products and technologies enable next-generation high-speed optical transmission systems, networks, and datacenter solutions necessary to meet the accelerating global bandwidth demand.

  Demand for our products is largely driven by the continually growing need for additional network bandwidth created by the ongoing proliferation of data and video traffic from video conferencing for work, school, and leisure; video downloads and streaming; live TV; social networking; online gaming; file sharing; enterprise IP/internet traffic; cloud computing; datacenter virtualization; and the new optical connectivity needed to support AI/ML.

  We are a global technology leader in optical communications, providing materials, subcomponents, components, modules, and subsystems to optical component and module manufacturers, networking equipment manufacturers, datacenter operators, enterprises, and telecom service providers. We design products that meet the increasing demands for network bandwidth and data storage.

  Our Telecom optical communications products can be divided into two main groups: optical transmission and optical transport. Our optical transmission products consist primarily of transmitters, receivers (as stand-alone parts or combined in different integrated solutions), transceivers, transponders, and active optical cables, which provide the fundamental optoelectronic interface for interconnecting the electronic equipment used in networks. This equipment includes switches, routers, and servers used in wireline networks. These products rely on advanced components, such as semiconductor lasers and photodetectors, in conjunction with integrated circuits and novel optoelectronic packaging to provide a cost-effective means for transmitting and receiving digital signals over fiber-optic cable at speeds ranging from less than 1 Gbps to more than 800 Gbps, and over distances of less than 10 meters to more than 5,000 kilometers, using a wide range of network protocols and physical configurations.

  Our optical transport products are at the core of both terrestrial and undersea optical networks, as well as emerging space optical communications connections. Our market-leading 980 nm pump lasers are the key enablers of our erbium-doped fiber amplifiers, which boost the power of optical signals in fiber-optic cables to allow high-speed signals to be transmitted over long distances. Our 14xx nm pumps enable Raman amplification, based on the stimulated Raman scattering (SRS) effect, of the optical signal traveling over long and ultralong distances. Our latest generation of components for coherent transceivers is critical to a new generation of small-size, long-reach DWDM transmission modules operating from 100 Gbps to 1 Tbps and beyond.

  Customers continue to rely on us for our industry-leading optical amplification and embedded monitoring solutions for their next-generation ROADM systems to compensate for inherent signal loss and to monitor signal integrity. Our proprietary OTDR modules allow systems to automatically detect and pinpoint issues along the transmission path in real time. Together with our OCM solutions, which monitor the optical power of the channels transmitted in a fiber-optic link, they enable real-time intelligence to perform preventive maintenance so as to preserve data transmission. In addition, we offer a portfolio of WSS products, which we also incorporate into ROADM line cards and subsystems.

  Our proven experience in both transmission and transport allows us to effectively address the emerging DCI market. Our transceivers, submodules, pluggable amplifiers, and configurable line cards are able to meet the requirements of low power consumption, compactness, ease of installation and operation, and cost savings, which are often mandatory features in the DCI market.

- *Datacom Market Vertical.* We see a major market transition in the datacom market vertical with the dramatic growth in AI and ML.

  Network changes to address AI and ML are driving the introduction of higher-speed transceivers at a faster pace than ever before. Only 20 years ago, the highest data rate for optical transceivers was 10G. Today, more than 50% of Coherent's datacom revenue is generated by 200G and higher data-rate transceivers. Driven by the demands of growing AI/ML adoption, 800G transceivers are shipping in production and we expect the first 1.6T transceiver samples will be shipped later this calendar year. In five years, the market opportunity for 800G and 1.6T datacom transceivers is expected to be greater than all other types of datacom transceivers combined, largely driven by AI and ML.

  At Coherent, we already have a complete portfolio of transceivers matched to the requirements set by AI and ML. These transceivers are protocol-agnostic, meaning the same transceiver hardware can support Ethernet and InfiniBand, as well as proprietary protocols for AI and ML such as NVIDIA's NVLink.

Over the years, we have made strategic investments that give us a unique level of vertical integration. We not only design and manufacture our transceivers internally, but we also design and manufacture many of the components, including lasers, detectors, ICs, and passive optics. When designing a new transceiver that requires a new component, we either source that component from one of our valued development partners, or we design and manufacture it internally. We decide what to develop internally and what to develop with suppliers based on business case, time to market, and strategic considerations.

800G and 1.6T transceivers require 100G/lane and 200G/lane lasers. The type of laser used is determined by the data rate and the fiber link length. Generally speaking, interconnects in the AI/ML fabric portion of the network (Level 0) are less than 50 m, interconnects connecting ToR switches to spine switches (Level 1) are up to 500 m, and interconnects connecting switches to routers or routers to routers (telecom access) are between 2 km and 10 km. Each of these distances and applications are best served by different laser technologies.

For link distances less than 100 m, including Level 0 interconnects and a subset of Level 1 interconnects, VCSELs are used. These are based on our GaAs technology platform. VCSELs are generally the lowest-cost, lowest-power-consumption solution, and are the lasers of choice for connections of less than 100 m.

Coherent has multiple 6-inch GaAs VCSEL fabs in the U.S. and Europe. Our 100G/lane VCSELs are in production to support 400G and 800G transceivers. We are working on 200G/lane VCSELs, which will require significant changes in the VCSEL device design and fabrication.

For Level 1 switching for distances greater than can be supported by VCSELs, and for telecom access, single-mode devices are used. These devices are made from InP materials. Coherent has multiple InP fabs in the U.S. and Europe; two of them are moving to 6-inch wafer capability.

For Level 1 link distances greater than 100 m, transceivers based on silicon photonics may be used. All silicon photonics products, including some of our own, need an InP CW laser to generate the light. For Level 1 links greater than 100 m, and for telecom access (2-10 km), electro-absorption modulated lasers, or EMLs, may be used. We manufacture 100G/lane EMLs to support 400G and 800G transceivers, such as our EML-based 800G DR8 transceiver, and we introduced our 200G/lane EML in 2022.

As we look forward to 200G/lane transceivers, achieving a 10 km reach is a significant challenge, even with EMLs. For that application, we have been developing a laser technology called DFB-MZ, which stands for Distributed Feedback Laser with Mach Zehnder. This is an InP CW laser monolithically integrated with an InP Mach Zehnder modulator. This laser technology will enable 1.6T transceivers with up to 10 km reach.

Electronics Market Group

- *Consumer Electronics Market Vertical.* We manufacture GaAs VCSELs and VCSEL arrays, InP edge-emitting lasers and photo diodes, as well as specialty glass wafers for the consumer electronics market. Our VCSEL products leverage our world-class 6-inch GaAs platform, combining our epitaxial wafer growth and wafer fabrication capabilities. Our VCSELs have been used in consumer products such as computer mice and mobile phones for many years. Our VCSELs are also widely deployed in datacenters and HDMI optical cables as well as in vehicle steering wheels. This expertise in VCSEL technology has been leveraged for the growing sensing market. 3D sensing was the first application to drive the demand for relatively large two-dimensional VCSEL arrays. A typical design for 3D sensing requires tens or hundreds of VCSELs per chip in order to scale up the optical power required for applications such as face recognition. Therefore, 3D sensing applications created the need to scale up manufacturing to 6-inch wafer processing. Today, Coherent is one of the very few vertically integrated 6-inch VCSEL manufacturers with a proven track record in high-volume manufacturing of high-reliability, large multi-emitter VCSEL arrays designed for 3D sensing. We are also one of the very few companies that have shipped InP diode lasers and photodiodes in high volume for consumer electronics applications; these are also manufactured in-house. An increasing number of consumer devices are coming on the market with embedded VCSELs, including multiple smartphones and tablets, AR/VR headsets, smart watches, and household robots.

  In addition to VCSELs, our products for the consumer electronics market include wafer-scale optics, diffraction gratings, thermoelectric coolers, driver ICs, and substrates for sensing and AR/VR applications.

- *Automotive Market Vertical.* We are a global leader in SiC substrates for power electronics that improve the energy efficiency of electric and hybrid-electric vehicles. Power electronics based on SiC enable systems to achieve significantly improved power utilization and conversion efficiencies, lower operating temperatures, and reduced thermal loads. This in turn enables either increased driving range or reductions in required battery capacity for a given range, which results in a significant cost reduction. Our comprehensive understanding of crystal growth and materials processing was acquired over decades of sustained R&D and manufacturing, allowing us to continuously evolve our technology and IP portfolio. We offer a full range of substrate diameters, including the world's first 200 mm substrate.

  Our industry-leading semiconductor lasers, optics, and materials can be leveraged for LiDAR systems embedded in advanced driver-assistance systems (ADAS) for autonomous vehicles. LiDAR sensors enable ADAS to perform functions such as emergency braking, distance warning, and adaptive cruise control. Coherent's broad portfolio of components and modules for LiDAR include high-power laser diodes, fiber amplifiers, frequency-modulated continuous-wave detection solutions, optical filters for detection, mirrors for scanning, and thermoelectric coolers for temperature control. Our product offerings include edge-emitters and VCSELs that are capable of providing a wide range of wavelengths and peak powers for direct illumination and imaging in short- and long-range LiDAR solutions. Emission and return windows on LiDAR systems are available in ultrahard bulk materials such as SiC and diamond, and with optical coatings that are water-shedding and oil-resistant. Our thermoelectric coolers are qualified to automotive standards and enable LiDAR systems to operate with optimal performance and efficiency.

  New generations of vehicles will be equipped with a greater number of sensors that can monitor a driver's alertness and let occupants interact with the console using touch sensing or gesture recognition. In the event of a collision, sensors can help provide critical information about the position and attention of occupants to activate restraints and deploy airbags in the best possible manner. Coherent's products enable the most advanced in-cabin control and monitoring systems for the latest applications in human-vehicle interactions. Our VCSELs are ideal for optical touch sensors integrated in dashboards or steering wheels. Our VCSEL arrays can provide infrared cabin illumination and structured light projection to enable gesture recognition.

  Automotive manufacturers continue to differentiate their products with comfort features such as temperature-controlled car seats and cup holders, all of which require thermoelectric devices. We offer thermal-management solutions that are qualified to stringent automotive industry standards and tailored to various applications.

  Coherent is also a world leader in innovative engineered materials and subsystems for thermal management, offering a broad portfolio that includes reaction-bonded Si/SiC materials, Al/SiC metal matrix composites, CVD diamond, single-crystal SiC, and thermoelectric coolers. With such extensive and diverse capabilities, we are uniquely positioned to deliver thermal management solutions that ideally match the performance and cost requirements of numerous applications, including: transportation, semiconductor manufacturing, information technology, life sciences, and consumer electronics.

- *Wireless Market Vertical.* Mobile traffic is increasing as a result of the proliferation of smartphones, tablet computers, and other mobile devices. In the mobile wireless market, we are a global leader in the strategic supply chain for materials and devices used in the latest 4G, 5G, and 6G base station infrastructure. The deployment of 5G wireless is accelerating globally, driving the demand for RF power amplifiers that can operate efficiently in new high-frequency bands and be manufactured on a technology platform that can scale to meet the growing demand. GaN-on-SiC RF power amplifiers have superior performance, compared with devices based on silicon, over a wide spectrum of 5G operating frequencies in the gigahertz range, including in the millimeter-wave bands.

  We are a market leader in the technology development and large-volume manufacturing of 100 mm, 150 mm, and the industry's first 200 mm semi-insulating SiC substrates. These substrates are utilized by customers worldwide to manufacture GaN-on-SiC HEMT RF power amplifier devices that are embedded in remote radio heads in 4G and 5G wireless base stations. In areas of high bandwidth demand, 5G antennas with beamforming technology using multiple devices per antenna are expected to be densely deployed, increasing the demand for GaN-on-SiC power amplifiers by approximately an order of magnitude or more versus 4G antennas. Looking forward, we continue to advance the state of the art in SiC substrates, with a strong technology portfolio of over 30 active patents using highly differentiated and proprietary manufacturing platforms and technologies including crystal growth, substrate fabrication, and polishing. Our introduction of the world's first 200 mm semi-insulating SiC substrates will enable the RF power amplifier market to continue to scale, increasingly replacing functions performed by devices based on silicon and enabling new applications.

  The GaN and InP technological platform, which are within the core competencies of Coherent, are key materials also for future 6G high-efficiency power amplifiers and low-noise amplifiers, enabling the best power performance in their respective frequency ranges.

Instrumentation Market Group

- *Life Sciences Market Vertical.* Within the life sciences end market, we focus on instrumentation that integrates light- and/or thermal-management solutions. We segment this market into three application areas (biotechnology, analytical, and medical) and deliver targeted and unique product portfolios for each segment. We vertically integrate from the material level (with various crystals for medical laser applications, or ZnS materials for NIR and IR spectroscopy) to high-precision components, complex subassemblies, and even full subsystems. Applications within the biotechnology segment include research and diagnostic tools such as flow cytometry, genome sequencing, PCR, and sequencing, to name a few. Our broad product portfolio delivers solutions covering illumination, light management, thermal management, sample loading, and detection. Visible-wavelength lasers and multicolored laser and LED engines provide low-noise, high-performance, reliable light sources.

  Optical components and subassemblies such as filters, lenses, flow cells, gratings, objective lenses, and patterned reticles are embedded into these instruments to manage light delivery and detection. Our state-of-the-art thermal engines precisely control temperature and uniformity across large areas such as plate and block assemblies, even extending to reagent or sample chilling. Finally, vertical integration into higher-level optomechanical-electrical subassemblies drives further value and decreased time to market for our customers.

  Analytical instrumentation includes spectroscopy-based applications such as monitoring of air and water, food and beverage products, agriculture, and pharmaceutical quality control, as environmental and safety concerns become more prevalent. These instrumentation platforms need to be rugged enough to be deployed in the field, and often must be transportable as well. Coherent’s solutions are the building blocks – lasers and LED solutions for illumination, optics for light management, sample loading, thermal control, and integrated detection solutions. We continue to leverage our materials and components to offer subassembly-level solutions at all wavelengths, from UV to NIR and IR.

  Medical applications comprise instrumentation that is used in the direct treatment of patients and includes medical lasers, imaging, point-of-care wearables, and thermal-based treatment solutions. Medical laser and clinical procedures are increasingly performed with systems that integrate our lasers, optics, and thermal solutions. These applications are performed at or near the patient, demanding extreme precision and often requiring complex designs that can reach into the NIR and IR wavelengths. Applications are varied, from laser-based treatments (ophthalmic, dental, aesthetic/ dermatological, and surgical) to medical imaging and even point-of-care diagnostics. Coherent’s semiconductor laser bars and stacks are used in applications such as hair and wrinkle removal, and femtosecond lasers combined with excimer lasers are used for common procedures like LASIK. Crystals and laser cavities, along with custom-designed lens assemblies, are used for ophthalmic, dental, and dermatological surgeries. CO_2 lasers are specifically used in hard- and soft-tissue dental procedures. Thermal components and subassemblies deliver solutions for medical-based applications such as providing heating and cooling to the human body and medical laser temperature control.

  We are uniquely positioned to leverage an expansive portfolio, decades of engineering expertise, global manufacturing, and vertical integration to meet performance, quality, and cost-reduction requirements. Coherent is a system-level partner from proof of concept to design and volume manufacturing, actively contributing to the global effort to address healthcare, environmental, and safety solutions.

- *Scientific Research Market Vertical.* Our products include CW lasers for microscopy, advanced ultrafast-pulsed laser sources, and high-energy pulsed excimer gas lasers. These systems are sold to universities and research institutions across the globe, fueling ideas for the next generation of materials, processes, medical diagnostics, and treatments that address some of the greatest challenges for humanity today. Our window to advanced research also ensures that we stay close to the latest emerging technologies and materials (for example, neuroscience advancements, optogenetic studies, and fusion research), steering our product roadmaps for the next generation of advanced manufacturing and instrumentation tools.

Sales and Marketing

We market our products and service through a direct sales force and through representatives and distributors around the world. Our market strategy is focused on understanding our customers’ requirements and building market awareness and acceptance of our products and service. New products are continually being developed and introduced to our new and established customers in all markets.

We have centralized our worldwide sales and strategic marketing functions. Sales offices have been strategically aligned to best serve and distribute products to our worldwide customer base. There are significant cooperation, coordination, and synergies among our business units, which capitalize on the most efficient and appropriate marketing channels to address diverse applications within our markets.

Our sales force develops effective communications with our OEM and end-user customers worldwide. Products are actively marketed through key account relationships, personal selling, select advertising, attendance at trade shows, digital marketing, and customer partnerships. Our sales force includes a highly trained technical sales support team to assist customers in designing, testing, and qualifying our products as key components of our customers' systems. As of June 30, 2024, we employed approximately 624 individuals in sales, marketing, and support.

We do business with a number of customers in the aerospace & defense industry, who in turn generally contract with a governmental entity, typically a U.S. government agency.

We had one customer who contributed more than 10% of revenue during fiscal 2024.

Competition

Coherent is a global leader in many of its product families. We compete, in part, on our core competencies from materials to systems, our differentiated products and service, and the sustainability of our competitive advantages. We also compete by leveraging our intellectual property, ability to scale, product quality, on-time delivery, and technical support. We believe that our vertical integration, manufacturing facilities and equipment, experienced technical and manufacturing employees, and worldwide marketing and distribution channels provide us with competitive advantages. The following are among our top competitors (in alphabetic order):

- Broadcom Corporation
- IDEX Corporation
- InnoLight Technology Corp.
- IPG Photonics, Inc.
- Lumentum Operations LLC
- MKS Instruments, Inc.
- Molex, LLC
- O-Net Technologies (Shenzhen) Group Co., Ltd.
- Sony Group Corporation
- Trumpf GmbH + Co. KG
- Wolfspeed, Inc

In addition to competitors who manufacture products similar to those we produce, there are other technologies and products available that may compete with our technologies and products.

Our Strategy

Our strategy is to grow businesses with world-class engineered materials and laser processing capabilities to advance our current customers' strategies, reach new markets through innovative technologies and platforms, and enable new applications in large and growing markets. A key strategy of ours is to develop and manufacture high-performance materials and, in certain cases, components incorporating those materials, that are differentiated from those produced by our competitors. We focus on providing components that are critical to the heart of our customers' products that serve the applications mentioned above.

We continue to grow the number and size of our key accounts. A significant portion of our business is based on sales orders with market leaders, which enables our forward planning and production efficiencies. We intend to continue capitalizing and executing on this proven model, participating effectively in the growth of the markets discussed above, and continuing our focus on operational excellence as we execute our primary business strategies.

Research and Development

During the fiscal year ended June 30, 2024, we continued to identify, invest in, and focus our R&D on new products and platform technologies in an effort to accelerate our organic growth. This approach is managed under a disciplined innovation program that we refer to as the Coherent Phase Gate Process.

We devote significant resources to R&D programs directed at the continuous improvement of our existing products and processes, and to the timely development of new materials, technologies, platforms, and products. We believe that our R&D activities are essential to establishing and maintaining a leadership position in each of the markets we serve. In addition, certain manufacturing personnel support or participate in our R&D efforts on an ongoing basis. We believe the close interaction between the development and manufacturing functions enhances the direction of our projects, reducing costs and accelerating technology transfers. It also offers development opportunities to our employees.

During the fiscal year ended June 30, 2024, we focused our R&D investments in the following areas:

Networking	
Area of Development:	**Our R&D Investments:**
Photonics design	Continue to develop and improve crystal materials, precision optical parts, and laser device components for photonics applications; develop new platforms and capabilities
Datacom transceivers	Enhance high-end 800G/1.6T product development, including RF and packaging designs; explore high-density, high-bandwidth co-packaged designs with VCSELs and through silicon photonics-based designs; continue to develop vertically integrated designs, including with lasers and ICs; continue cost reduction on 400G/200G and 10G-100G products by leveraging our engineering resources and manufacturing scale
Optical circuit switch (OCS)	Develop the OCS product family for AI/ML and hyperscale data centers based on the digital liquid-crystal technology that underpins one of our WSS product lines
Coherent optics and transceivers	Drive further integration to reduce size and power consumption; increase bandwidth to enable 100G/200G/400G/800G coherent transceivers; optimize product cost with new design architectures and more efficient manufacturing flow
Integrated circuits	Develop high-speed integrated circuits for data communications and coherent optical communications
Pump lasers	Continue to invest in our next-generation GaAs pump laser portfolio and flexible manufacturing footprint to address evolving terrestrial and undersea markets
	Develop InP growth and processing capability together with associated packaging technology for Raman amplification applications
Optical amplifiers and subsystems	Invest in and broaden the range of amplifiers and integrated subsystems, including ROADMs
Optoelectronic chip hybrid integration platform (OCHIP)	Develop wafer-scale assembly technologies and processes for integration of lasers, optics, and ICs
Silicon photonics devices	Develop silicon-based photonic devices for coherent and direct-detection transceivers and co-packaging solutions
Wavelength selective switches	Develop LC and LCoS technologies and associated module designs for WSS; invest in manufacturing equipment, including the WSS automated assembly platform
Optical monitoring	Continue optical channel monitoring investment
	Develop OTDRs to monitor the health of the fiber plant
Micro-optics manufacturing	Shift toward smaller, more compact optics and automated assembly platforms and packages
	Invest in manufacturing equipment for computerized processes

Materials	
Area of Development:	**Our R&D Investments:**
High-power laser diodes Semiconductor lasers Devices for optical communications, sensing, and high-volume manufacturing	Increase output power and reliability of edge-emitting laser diodes for fiber laser, optical communications, and sensing applications
	Develop high-power VCSELs, including multi-junction VCSELs for 3D sensing and consumer devices as well as next-generation, high-speed VCSELs for datacom applications
	Develop high-power and high-speed InP lasers, detectors, and components for applications in optical communications and sensing

High-power beam delivery	Develop multi-kW beam delivery systems and cables for welding and cutting
CVD diamond technology	Develop CVD diamond for EUV applications and as substrates for high-performance RF devices
	Broaden our portfolio beyond infrared window applications
SiC technology SiC epitaxial wafers, devices, and modules	Develop advanced SiC substrate growth technologies to support emerging markets in GaN RF and SiC power electronics
	Continuous improvement to maintain world-class, high-quality, large-diameter substrates and epitaxial wafers
	Develop SiC epitaxial wafers, SiC diodes and MOSFET devices, and SiC power modules
Thermoelectric materials and devices	Continue to develop leading Bi_2Te_3 materials for thermoelectric cooling/heating
	Focus on thermoelectric power-generation capability in order to introduce new products
Metal matrix composites and reaction-bonded ceramics	Support industrial customers in developing application-specific material wear-out, lightweight high-mechanical-stability materials, and thermal-management solutions
Fiber laser technologies	Develop high-power fiber laser technologies for aerospace & defense and commercial applications
High-speed ICs	Develop high-performance analog TIAs, laser drivers, and clock and data-recovery retimer ICs
Battery technology	Develop technology for lithium-ion batteries and battery recycling processes
Additive manufacturing	Develop alloys and multibeam delivery systems for laser additive manufacturing
	Develop binder jet additive manufacturing for advanced ceramic components

Lasers	
Area of Development:	**Our R&D Investments:**
Diode-pumped solid-state lasers	Continue to develop solid-state lasers for industrial applications for materials processing, instrumentation, and scientific applications, including extension of wavelengths using nonlinear optics (harmonic generation), especially into the ultraviolet wavelength range
	Continuous-wave operation as well as pulsed systems with pulses in the range of 400 fs to 100 ns
Ultrafast fiber lasers	Continued development of industrial femtosecond fiber lasers with 50-200 µJ pulse energy, including UV generation, for semiconductor capital equipment and display manufacturing; power-scaling and wavelength range extension for low energy (<1 µJ), high repetition rate (80 MHz), femtosecond fiber laser systems used in multi-photon imaging
Femtosecond oscillators and amplifiers	Continue to develop ultrafast laser systems for scientific applications based on Ti:sapphire and Yb-doped gain materials with sub-100-fs pulse duration
Optically pumped semiconductor lasers (OPSLs)	Continue to broaden the product portfolio of continuous-wave, visible, and ultraviolet OPSLs by offering new wavelengths, increasing the output power and further reducing the product footprint; this includes the development of single-frequency ultraviolet cw OPSL-based systems
Semiconductor lasers	Increase output power and reliability of GaAs- and InP-based edge-emitting semiconductor lasers (single emitters, bars, stacks, and fiber-coupled modules) for laser pumping, industrial, and defense applications
Excimer lasers and excimer laser tools	Continue to support existing excimer laser-based applications in display manufacturing, instrumentation, and materials processing. Increase output power and reliability of pulsed excimer lasers (wavelength range of 193 nm to 308 nm) and continue to develop new excimer laser-based tools for display manufacturing

CO_2 lasers	Continue to develop medium-power slab waveguide CO_2 lasers (20 W to 1 kW) used in industrial applications with an emphasis on improved reliability and decreased cost; continue to develop and support new applications for high-power slab waveguide CO_2 lasers with average output powers of up to 8 kW
Laser tools	Continue to develop laser-based tools used for marking, cutting, and welding applications with an emphasis on process control
Laser crystal and nonlinear crystal growth	Support and optimize growth processes of laser crystals (e.g., Nd:YVO4, Nd:YAG, Yb:YAG, Yb:KYW, Yb:CALGO) and nonlinear crystals (e.g., LBO, BBO) used in laser systems; continued improvement in crystal quality (absorption, homogeneity, scattering) and in crystal lifetime during laser operation
Optical fibers	Continue to broaden the portfolio of passive optical fibers and doped active fibers (doped with Nd, Yb, Er, Tm) and develop novel fiber designs for improved fiber laser performance
Optical components for laser systems	Continued development of optical components used in laser systems, including isolators, rotators, volume Bragg gratings; continued improvement of optical coatings for laser mirrors and lenses
Large-scale mirrors and lenses	Invest in fabrication technologies for large-sized lenses and mirrors used in astronomy and aerospace & defense applications; support fabrication of large-dimension cylinder lenses for excimer-based laser tools used in display manufacturing

Other R&D	
Area of Development:	**Our R&D Investments:**
Space-based laser communications	Develop technology and devices for space-based laser communications

R&D expenditures were $479 million, $500 million, and $377 million for the fiscal years 2024, 2023, and 2022, respectively.

Import and Export Compliance

We are required to comply with all relevant import/export and economic sanctions laws and regulations, including:

- The import regulations administered by U.S. Customs and Border Protection;
- The International Traffic in Arms Regulations administered by the U.S. Department of State, Directorate of Defense Trade Controls, which among other things impose licensing requirements on the export from the United States of certain defense articles and defense services, generally including items that are specially designed or adapted for a military application and/or listed on the United States Munitions List;
- The Export Administration Regulations administered by the U.S. Department of Commerce, Bureau of Industry and Security, which among other things impose licensing requirements on certain dual-use goods, technology, and software; and
- The regulations administered by the U.S. Department of the Treasury, Office of Foreign Assets Control, implementing economic sanctions against designated countries, governments, and persons based on U.S. foreign policy and national security considerations.

Foreign governments also have similar import and export control, and sanctions, laws, and regulations. For additional discussion regarding our import, export, and sanctions compliance, see the discussion in Item 1A. Risk Factors of this Annual Report on Form 10-K.

Trade Secrets, Patents, and Trademarks

Our use of trade secrets, proprietary know-how, trademarks, copyrights, patents, contractual confidentiality, and IP ownership provisions helps us develop and maintain our competitive position with respect to our products and manufacturing processes. We aggressively pursue process and product patents in certain areas of our businesses and in certain jurisdictions across the globe. We have entered into selective intellectual property licensing agreements. We have confidentiality and noncompetition agreements with certain personnel. We require our U.S. employees to sign a confidentiality and noncompetition agreement upon commencement of their employment with us. As of June 30, 2024, we had a total of approximately 3,100 patents globally.

Executive Officers of the Registrant

The executive officers of the Company and their respective ages and positions as of June 30, 2024, are set forth below. Each executive officer listed has been appointed by the Board of Directors to serve until removed or until a successor is appointed and qualified.

Name	Age	Position
Jim Anderson	51	Chief Executive Officer
Giovanni Barbarossa	61	Chief Strategy Officer and President, Materials
Walter R. Bashaw II	58	President
Richard Martucci	56	Interim Chief Financial Officer and Treasurer
Christopher Koeppen	52	Chief Innovation Officer
Julie Sheridan Eng	56	Chief Technology Officer
Ronald Basso	63	Chief Legal and Compliance Officer & Secretary
Ilaria Mocciaro	53	Chief Accounting Officer

Jim Anderson was appointed Chief Executive Officer of Coherent Corp. and a member of the Board of Directors on June 3, 2024. He previously served as a director and as President and Chief Executive Officer of Lattice Semiconductor Corporation since September 2018. Prior to joining Lattice, Mr. Anderson served as the Senior Vice President and General Manager of the Computing and Graphics Business Group at Advanced Micro Devices, Inc. (AMD). Prior to AMD, Mr. Anderson held a broad range of leadership positions spanning general management, engineering, sales, marketing, and corporate strategy at companies including Intel, Broadcom (formerly Avago Technologies), and LSI Corporation. Mr. Anderson served on the Board of Directors of Entegris, Inc., from March 2023 to July 2024 and on the Board of Directors of the Semiconductor Industry Association through June 2024. He previously served on the Board of Directors of Sierra Wireless from April 2020 to January 2023. Mr. Anderson earned an MBA and Master of Science degree in electrical engineering and computer science from the Massachusetts Institute of Technology, a Master of Science degree in electrical engineering from Purdue University, and a bachelor’s degree in electrical engineering from the University of Minnesota.

Giovanni Barbarossa joined the Company in 2012 and has been the Chief Strategy Officer of the Company and the President of the Materials Segment since July 2019. Previously, he was the Chief Technology Officer of the Company and the President of the Laser Solutions Segment. Dr. Barbarossa was employed at Avanex Corporation from 2000 through 2009, serving in various executive positions in product development and general management, ultimately serving as the President and Chief Executive Officer. When Avanex merged with Bookham Technology, forming Oclaro, Inc., Dr. Barbarossa became a member of the Board of Directors of Oclaro and served as such from 2009 to 2012. Previously, he had management responsibilities at British Telecom, AT&T Bell Labs, Lucent Technologies, and Hewlett Packard. Dr. Barbarossa graduated from the University of Bari, Italy, with a B.S. in Electrical Engineering, and has a Ph.D. in Photonics from the University of Glasgow, U.K.

Walter R. Bashaw II joined the Company in 2018 and has been President of the Company since July 2019. Mr. Bashaw previously served as Vice President of Strategy. In this role, he was primarily responsible for the Company’s M&A and integration work. Prior to joining the Company, Mr. Bashaw was a senior partner at the law firm of Sherrard, German & Kelly, P.C. in Pittsburgh, Pennsylvania, where his areas of expertise were corporate law, mergers and acquisitions, and technology planning. Mr. Bashaw holds a J.D. from the University of Pittsburgh School of Law, from which he graduated cum laude and at which he was the editor-in-chief of the University of Pittsburgh Journal of Law and Commerce. He holds a B.S. in Logistics from the Pennsylvania State University.

Richard Martucci has been the interim Chief Financial Officer and interim Treasurer for Coherent Corp since September 2023. He joined Coherent in 2015 as the Infrared Optics Division Controller and since then has served as the Lasers Solutions Segment Vice President of Finance, the Materials Segment Vice President of Finance, and most recently the Senior Vice President of Business Operations. Prior to joining Coherent, Mr. Martucci served in various financial roles at Xylem Inc. and Thermo Fisher Scientific Inc. He has over 30 years' experience in finance and manufacturing operations across several industries. Mr. Martucci holds a bachelor of science degree in Business Administration from Robert Morris University and a MBA from Gannon University. He is a registered CPA in the state of Illinois.

Christopher Koeppen joined the Company in 2011 following the acquisition of Aegis Lightwave, Inc., where he served as General Manager, Aegis-NJ. He was named General Manager of the Agile Network Products Division in 2012 and Director of Corporate Strategic Technology Planning in 2015. He then served as Vice President of the Industrial Laser Group and Corporate Strategic Technology Planning from 2017 until his appointment as Chief Technology Officer in 2019. In October, 2022, Dr. Koeppen was appointed Chief Innovation Officer of the Company. Previously, Dr. Koeppen was co-founder and CEO of CardinalPoint Optics, prior to its acquisition by Aegis Lightwave. He has more than two decades of progressively increasing general and technology management experience in high-tech companies, including at Meriton Networks, Mahi Networks, Photuris, and Lucent Technologies. Dr. Koeppen holds a Ph.D. in Physics from the University of Pennsylvania, where he was an AT&T Bell Laboratories Scholar, and B.S. degrees in Physics and Mathematics from the Pennsylvania State University.

Julie Sheridan Eng was appointed Chief Technology Officer of the Company in October 2022. Prior to becoming CTO, Dr. Eng served as Senior Vice President and General Manager of the Company's Optoelectronic Devices and Modules Business Unit. Dr. Eng joined the Company in 2019 with the acquisition of Finisar Corporation, where she held various senior management positions, including Executive Vice President and General Manager of 3D Sensing, and Executive Vice President of Datacom Engineering. Dr. Eng spent over 20 years in the optoelectronics and optical communications industries, including roles at AT&T, Lucent, and Agere. Dr. Eng received her PhD and M.S. in electrical Engineering from Stanford, and an M.S. and B.A. from Bryn Mawr College (summa cum laude) and a B.S., with honors from the California Institute of Technology (Caltech). In 2022, Dr. Eng was elected a Fellow of Optica (formerly the Optical Society of America) for distinguished contributions to the advancement of optics and photonics.

Ronald Basso joined the Company in 2019 as Vice President, Corporate Development, and was named Chief Legal and Compliance Officer and Corporate Secretary in March 2022. Previously, Mr. Basso was the Executive Vice President of Business Development, General Counsel & Secretary for Black Box Corporation for six years. Before that, his 28-year career at Buchanan Ingersoll & Rooney PC involved significant client engagements on corporate, governance, securities, capital markets transactions, M&A, and executive compensation matters. He served on the Coherent IPO team in 1987 and as Coherent's SEC counsel for 25 years until he joined Black Box. Mr. Basso holds a bachelor's degree (summa cum laude) in Economics and a Juris Doctor degree (Order of the Coif) from the University of Pittsburgh.

Ilaria Mocciaro joined Coherent Corp. in February 2023 as the Senior Vice President, Chief Accounting Officer, and Corporate Controller. Ms. Mocciaro joined Coherent from CDW, where she was the Vice President, Chief Accounting Officer, and Controller from 2020 to 2022. From 2016 to 2020, she was the Senior Vice President, Chief Accounting Officer, and Global Controller at Anixter International Inc., where she helped close the sale of Anixter to Wesco. From 2011 to 2016, Ms. Mocciaro was the Chief Accounting Officer of the agricultural and construction equipment segments at CNH Industrial N.V., after serving as Director of Accounting and Reporting. She led Internal Audit at McMaster-Carr Supply Company from 2010 to 2011 and previously held several management positions at Ernst & Young LLP in Chicago and Milan, Italy, from 1997 to 2010. Ms. Mocciaro holds a B.A. degree in Accounting and Business Administration from the Catholic University of the Sacred Heart (Università Cattolica del Sacro Cuore) in Milan.

Availability of Information

Our internet address is www.coherent.com. Information contained on our website is not part of, and should not be construed as being incorporated by reference into, this Annual Report on Form 10-K. We post the following reports on our website as soon as reasonably practical after they are electronically filed with or furnished to the SEC: our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and any amendments to those reports or statements filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. In addition, we post our proxy statements on Schedule 14A related to our annual shareholders' meetings as well as reports filed by our directors, officers, and 10% beneficial owners pursuant to Section 16 of the Exchange Act. In addition, all filings are available via the SEC's website (www.sec.gov). We also make our corporate governance documents available on our website, including the Company's Code of Ethical Business Conduct, Governance Guidelines, and the charters for our board committees. All such documents are located on the Investors page of our website and are available free of charge.

Item 1A. RISK FACTORS

The following are certain risk factors that could affect our business, results of operations, financial condition or cash flows. These risk factors should be considered along with any forward-looking statements contained in this Annual Report on Form 10-K, because these factors could cause our actual results or financial condition to differ materially from those projected in forward-looking statements. The following discussion is not an all-inclusive listing of risks, although we believe these are the material risks that we face. If any of the following occur, our business, results of operations, financial position, or cash flows could be adversely affected. You should carefully consider these factors, as well as the other information contained in this Annual Report on Form 10-K, when evaluating an investment in our securities.

Risks Relating to Our Business and Our Industry

Investments in future markets of potential significant growth may not result in the expected return.

We continue to make investments in programs with the goal of gaining a greater share of end markets using laser systems, semiconductor lasers and components, including the key components for fast growth markets. We cannot guarantee that our investments in capital and capabilities will be sufficient. The potential end markets, as well as our ability to gain market share in such markets, may not materialize on the timeline anticipated or at all. We cannot be sure of the end market price, specification, or yield for products incorporating our technologies. Our technologies could fail to fulfill, partially or completely, our target customers' specifications. We cannot guarantee the end market customers' acceptance of our technologies. Further, we may be unable to fulfill the terms of our contracts with our target customers, which could result in penalties of a material nature, including damages, loss of market share, and loss of reputation.

Our competitive position depends on our ability to develop new products and processes.

To meet our strategic objectives, we must develop, manufacture, and market new products and continue to update our existing products and processes to keep pace with sudden increases in market demand and other market developments and to address increasingly sophisticated customer requirements. Our success in developing and selling new and enhanced products and processes depends upon a variety of factors, including strategic product selection, efficient completion of product design and development, timely implementation of manufacturing and assembly processes, effective sales and marketing, and high-quality and successful product performance in the market.

The introduction by our competitors of products or processes using new developments that are better or lower cost than ours could render our products or processes obsolete or unmarketable. We intend to continue to make significant investments in research, development, and engineering to achieve our goals. There can be no assurance that we will be able to develop and introduce new products or enhancements to our existing products and processes in a manner which satisfies customer needs or achieves market acceptance. The failure to do so could have a material adverse effect on our ability to grow our business and maintain our competitive position and on our results of operations and/or financial condition.

Our products may contain defects that are not detected until deployed, which could increase our costs, reduce our revenues, cause us to lose key customers, or expose us to litigation related to our products.

Some systems that use our products are inherently complex in design. As a result of the technological complexity of our products, in particular our excimer laser annealing tools used in the display capital equipment market, changes in our or our suppliers' manufacturing processes or the inadvertent use of defective materials by us or our suppliers could result in a material adverse effect on our ability to achieve acceptable manufacturing yields and product reliability. Our customers may also discover defects in our products after the products have been fully deployed and operated under peak stress conditions. In addition, some of our products are combined with products from other vendors which may contain defects. Should problems occur, it may be difficult to identify the source of the problem. If we are unable to correct defects or other problems, we could experience, among other things, loss of customers, increased costs of product returns and warranty expenses, damage to our brand reputation, failure to attract new customers or achieve market acceptance, diversion of development and engineering resources, or legal action by our customers. The occurrence of any one or more of the foregoing factors could have a material adverse effect on our business, results of operations, or financial condition.

Our competitive position may require significant investments.

We continuously monitor the marketplace for strategic opportunities, and our business strategy includes expanding our product lines and markets through both internal product development and acquisitions. Consequently, we expect to continue to consider strategic acquisition of businesses, products, or technologies complementary to our business. This may require significant investments of management time and financial resources. If market demand is outside our organic capabilities, if a strategic acquisition is required and we cannot identify one or execute on it, and/or if financial investments that we undertake distract management, do not result in the expected return on investment, expose us to unforeseen liabilities, or jeopardize our ability to comply with our credit facility covenants due to any inability to integrate the business, adjust to operating a larger and more complex organization, adapt to additional political and other requirements associated with the acquired business, retain staff, or work with customers, we could suffer a material adverse effect on our business, results of operations, or financial condition.

We may be unable to successfully implement our acquisitions strategy or integrate acquired companies and personnel with existing operations.

We have acquired several relatively large companies, including Finisar Corporation in September 2019 and Coherent, Inc. in July 2022. We expect to expand and diversify our operations with additional acquisitions, but we may be unable to identify or complete prospective acquisitions for many reasons, including increasing competition from other potential acquirers, the effects of consolidation in our industries, and potentially high valuations of acquisition candidates. In addition, applicable competition laws and other regulations may limit our ability to acquire targets, integrate businesses, or force us to divest an acquired business line. If we are unable to identify suitable targets or complete acquisitions, our growth prospects may suffer, and we may not be able to realize sufficient scale and technological advantages to compete effectively in all markets. To the extent that we complete acquisitions, we may be unsuccessful in integrating acquired companies or product lines with existing operations, or the integration may be more difficult or more costly than anticipated.

We incurred substantial expenses related to the acquisition of Coherent, Inc. and we continue to incur substantial expenses related to the integration of Coherent, Inc. and its subsidiaries. Some of the risks that may affect our ability to integrate or realize anticipated benefits from acquired companies, businesses, or assets include those associated with:

- a significant negative financial result from the acquired company relative to our pre-acquisition expectations;
- unexpected losses of key employees of the acquired company;
- standardizing the combined company’s standards, processes, procedures, and controls, including integrating enterprise resource planning systems and other key business applications;
- coordinating new product and process development;
- increasing complexity from combining operations;
- increasing the scope, geographic diversity, and complexity of our operations;
- difficulties in consolidating facilities and transferring processes and know-how;
- diversion of management’s attention from other business concerns; and
- actions we may take in connection with acquisitions, such as:
    - using a significant portion of our available cash;
    - issuing equity securities, which would dilute current shareholders’ percentage ownership;
    - incurring significant debt;
    - incurring or assume contingent liabilities, known or unknown, including potential lawsuits, infringement actions, or similar liabilities;
    - incurring impairment charges related to goodwill or other intangibles; and
    - facing antitrust or other regulatory inquiries or actions.

In addition, the market prices of our outstanding securities could be adversely affected if the effect of any acquisitions on our consolidated financial results is dilutive or is below the market’s or financial analysts’ expectations, or if there are unanticipated changes in the business or financial performance of the acquired or combined company. Any failure to successfully integrate acquired businesses may disrupt our business and adversely impact our business, results of operations, or financial condition.

Although we expect that our acquisitions will result in cost savings, synergies, and other benefits, we may not realize those benefits, or be able to retain those benefits even if realized.

The success of our acquisitions will depend in large part on our success in integrating the acquired operations, strategies, technologies, and personnel. We may fail to realize some or all of the anticipated benefits of an acquisition if the integration process takes longer than expected or is more costly than expected. If we fail to meet the challenges involved in successfully integrating any acquired operations or to otherwise realize any of the anticipated benefits of an acquisition, including any expected cost savings and synergies, our operations could be impaired. In addition, the overall integration of an acquired business can be a time-consuming and expensive process that, without proper planning and effective and timely implementation, could significantly disrupt our business.

Potential difficulties that we may encounter in the integration process include:

- the integration of management teams, strategies, technologies and operations, products, and services;
- the disruption of ongoing businesses and distraction of their respective management teams from ongoing business concerns;
- the retention of, and possible decrease in business from, existing customers;
- the creation of uniform standards, controls, procedures, policies, and information systems;
- the reduction of the costs associated with combined operations;
- the integration of corporate cultures and maintenance of employee morale;
- the retention of key employees; and
- potential unknown liabilities associated with the acquired business.

The anticipated cost savings, synergies, and other benefits of any acquisition typically assume a successful integration of the acquired business and are based on projections and other assumptions, which are inherently uncertain. Even if integration is successful, anticipated cost savings, synergies, and other benefits may not be achieved.

Our future success depends on continued international sales, and our global operations are complex and present multiple challenges to manage.

We anticipate that international sales will continue to account for a significant portion of our revenues for the foreseeable future. The failure to maintain our current volume of international sales could materially affect our business, results of operations, financial condition, and/or cash flows.

We manufacture products in numerous countries worldwide. Our operations vary by location and are influenced on a location-by-location basis by local customs, languages, and work practices, as well as different local weather conditions, management styles, and education systems. In addition, multiple complex issues may arise concurrently in different countries, potentially hampering our ability to respond in an effective and timely manner. Any inability to respond in an effective and timely manner to issues in our global operations could have a material adverse effect on our business, results of operations, or financial condition.

We are subject to complex and rapidly changing import and export regulations of the countries in which we operate and/or sell which could limit our sales and decrease our profitability, and we may be subject to legal and regulatory consequences if we do not comply with applicable export control laws and regulations.

We are subject to the passage of and changes in the interpretation of regulation by U.S. government entities at the federal, state, and local levels and by non-U.S. agencies, including, but not limited to, the following:

- We are required to comply with import laws and export control and economic sanctions laws, which may affect our ability to enter into or complete transactions with certain customers, business partners, and other persons. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services, and technologies. We may be required to obtain an export license before exporting a controlled item, and granting of a required license cannot be assured. Compliance with the import laws that apply to our businesses may restrict our access to, and may increase the cost of obtaining, certain products and could interrupt our supply of imported inventory.

- Exported technologies, including, but not limited to, equipment necessary to develop and manufacture certain products are subject to U.S. export control laws and similar laws of other jurisdictions. We may be subject to adverse regulatory consequences, including government oversight of facilities and export transactions, monetary penalties, and other sanctions for violations of these laws. In certain instances, these regulations may prohibit us from developing or manufacturing certain of our products for specific applications outside the United States. Failure to comply with any of these laws and regulations could result in civil and criminal, monetary, and nonmonetary penalties; disruptions to our business; limitations on our ability to import and export products and services; and damage to our reputation.

Obtaining export licenses can be difficult, time-consuming and require interpretation of complex regulations. Failure to obtain and/or retain export licenses for these shipments could significantly reduce our revenue and materially adversely affect our business, financial condition, results of operations and relationships with our customers. Additionally, failure to comply with the various regulatory requirements could subject us to significant fines, suspension of export privileges or disbarment.

We may fail to accurately estimate the size and growth rate of our markets and our customers’ demands.

We make significant decisions based on our estimates of customer requirements. We use our estimates to determine the levels of business we seek and accept, production schedules, personnel needs, and other resource requirements.

Customers may require rapid increases in production on short notice. We may not be able to purchase sufficient supplies or allocate sufficient manufacturing capacity to meet such increases in demand. Rapid customer ramp-up and significant increases in demand may strain our resources or negatively affect our margins. Inability to satisfy customer demand in a timely manner may harm our reputation, reduce our other opportunities, damage our relationships with customers, reduce revenue growth, and/or cause us to incur contractual penalties.

Alternatively, downturns in the industries in which we compete, or changes in technology, may cause our customers to significantly and abruptly reduce their demand, or even cancel orders. With respect to orders we initiate with our suppliers to address anticipated demand from our customers, certain suppliers may have required noncancellable purchase commitments or advance payments from us, and those obligations and commitments could reduce our ability to adjust our inventory or expense levels to reflect declining market demands. Unexpected declines in customer demands can result in excess or obsolete inventory and additional charges. Because certain of our sales, research and development, and internal manufacturing overhead expenses are relatively fixed, a reduction in customer demand likely would decrease our gross margins and operating income.

We may encounter increased competition, and we may fail to accurately estimate our competitors' or our customers' willingness and capability to backward integrate into our competencies and thereby displace us.

We may encounter substantial competition from other companies in the same market, including established companies with significant resources. Some of our competitors may have financial, technical, marketing, or other capabilities that are more extensive than ours. They may be able to respond more quickly than we can to new or emerging technologies and other competitive pressures. We may not be able to compete successfully against our present or future competitors. Our failure to compete effectively could have a material adverse effect on our business, results of operations, or financial condition.

A significant portion of our business may be subject to cyclical market factors.

Our business is dependent on the demand for products produced by end-users of industrial, communications, electronics, and instrumentation markets. Many of these end-users are in industries that have historically experienced a highly cyclical demand for their products. As a result, demand for our products is subject to these cyclical fluctuations. Fluctuations in demand could have a material adverse effect on our business, results of operations or financial condition.

The long sales cycles for many of our products may cause us to incur significant expenses.

Customers often view the purchase of our products as a significant and strategic decision. As a result, customers typically expend significant effort in evaluating, testing and qualifying our products before making a decision to purchase them, resulting in a lengthy design-in sales cycle. While our customers are evaluating our products and before they place an order with us, we may incur substantial sales and marketing and research and development expenses to customize our products to the customers' needs. We may also expend significant management efforts, increase manufacturing capacity and increase inventory of long lead-time components or materials prior to receiving an order. Even after this evaluation process, a potential customer may not purchase our products. As a result, these long sales cycles may cause us to incur significant expenses without ever receiving revenues to offset such expenses.

We have entered into supply agreements that commit us to supply products on specified terms.

We have supply agreements with some customers that require us to supply products and allocate sufficient capacity to make these products. We have also agreed to pricing schedules and methodologies that could result in penalties if we fail to meet development, supply, capacity, and quality commitments. Failure to do so may cause us to be unable to generate the amount of revenue or the level of profitability we expect from these arrangements. Our ability to realize a profit under some of these agreements will be subject to the level of customer demand, the cost of maintaining facilities and manufacturing capacity, and supply chain capability. If we fail to fulfill our commitments under these supply agreements, our business, after using all remedies available, financial condition, and results of operations may suffer a material adverse effect.

We depend on highly complex manufacturing processes that require strategic materials, components, and products from limited sources of supply.

Our operations are dependent upon a supply chain of difficult-to-make or difficult-to-refine products and materials, including integrated circuits, mechanical housings and optical components, and some of our product inflow is subject to yield reductions from growth or fabrication losses, and thus the quantities we may receive are not consistently predictable. Customers may also change a specification for a product that our suppliers cannot meet which may limit and/or otherwise impact our ability to supply such customers.

Some of our products, for example in the OLED display industry, require designs and specifications that are at the cutting-edge of available technologies and change frequently to meet rapidly evolving market demands. By their very nature, the types of components used in such products can be difficult and unpredictable to manufacture and may only be available from a single supplier, which increases the risk that we may not obtain such components in a timely manner. Identifying alternative sources of supply for certain components could be difficult and costly, result in management distraction in assisting our current and future suppliers to meet our and our customers' technical requirements, and cause delays in shipments of our products while we identify, evaluate and test the products of alternative suppliers. Any such delay in shipment would result in a delay or cancellation of our ability to convert such orders into revenues. Furthermore, financial or other difficulties faced by these suppliers or significant changes in demand for these components or materials could limit their availability. We continue to consolidate our supply base and move supplier locations. When we transition locations, we may increase our inventory of such products as a "safety stock" during the transition, which may cause the amount of inventory reflected on our balance sheet to increase. Additionally, many of our customers rely on sole source suppliers. In the event of a disruption of our customers' supply chain, orders from our customers could decrease or be delayed.

We also make products of which we are one of the world's largest suppliers. We use high-quality, optical-grade ZnSe in the production of many of our IR optical products. We are a leading producer of ZnSe for our internal use and for external sale. The production of ZnSe is a complex process requiring a highly controlled environment. A number of factors, including defective or contaminated materials, could adversely affect our ability to achieve acceptable manufacturing yields of high-quality ZnSe. Lack of adequate availability of high-quality ZnSe could have a material adverse effect upon our business. There can be no assurance that we will not experience manufacturing yield inefficiencies that could have a material adverse effect on our business, results of operations, or financial condition.

We produce hydrogen selenide gas, which is used in our production of ZnSe. There are risks inherent in the production and handling of such material. Our lack of proper handling of hydrogen selenide could require us to curtail our production of the gas. Our potential inability to internally produce hydrogen selenide could have a material adverse effect on our business, results of operations, or financial condition.

In addition, we use rare earth minerals and produce and use high-purity and relatively uncommon materials and compounds to manufacture our products, including, but not limited to, ZnS, GaAs, yttrium aluminum garnet, yttrium lithium fluoride, calcium fluoride, germanium, selenium, telluride, Bi_2Te_3, and SiC. A significant failure of our internal production processes or our suppliers to deliver sufficient quantities of these necessary materials (including, in the case of rare earth minerals, as a consequence of their limited diminished availability) on a timely basis could have a material adverse effect on our business, results of operations, or financial condition.

Furthermore, we have historically relied exclusively on our own production capability to manufacture certain strategic components, crystals, semiconductor lasers, fiber, lasers and laser-based systems. We also manufacture certain large format optics. Because we manufacture, package and test these components, products and systems at our own facilities, and such components, products and systems are not readily available from other sources, any interruption in manufacturing would adversely affect our business.

We participate in the semiconductor capital equipment market, which requires significant research and development expenses to develop and maintain products, and a failure to achieve market acceptance for our products could have a significant negative impact on our business and results of operations.

The semiconductor capital equipment market is characterized by rapid technological change, frequent product introductions, the volatility of product supply and demand, changing customer requirements and evolving industry standards. The nature of this market requires significant research and development expenses to participate, with substantial resources invested in advance of material sales of our products to our customers in this market. Additionally, our product offerings may become obsolete given the frequent introduction of alternative technologies. Situations where either our customers' or our products fail to gain market acceptance, or the semiconductor capital equipment market fails to grow, it would likely have a significant negative effect on our business and results of operations.

There are risks associated with our participation in the display capital equipment market, including there being a relatively limited number of end customer manufacturers.

In the display capital equipment market, it is unclear when the timing will be, or whether it will occur at all, for any further build-out of fabs for the manufacture of OLED screens, and there are a relatively limited number of manufacturers who are the end customers for our annealing products. Given macroeconomic conditions, varying consumer demand and technical process limitations at manufacturers, we may see fluctuations in orders, including periods with no or few orders, and our customers may seek to reschedule or cancel orders.

Additionally, challenges in meeting evolving technological requirements for these complex products by us and our suppliers could result in delays in shipments and rescheduled or cancelled orders by our customers. This could negatively impact our backlog, timing of revenues and results of operations.

The Laser segment service revenue can experience fluctuations driven by market demand as well as customer factors such as inventory management and the ability to run some systems at lower power levels during times of lower demand from their external customers. This can impact short-term service demand and cause some fluctuations in the Laser segment service revenues.

Increases in commodity prices and diminished availability of rare earth minerals and noble gases may adversely affect our results of operations and financial condition.

We are exposed to a variety of market risks, including the effects of increases in commodity prices and diminished availability of rare earth minerals and noble gases. Our businesses purchase, produce, and sell raw materials based upon quoted market prices from minor metal exchanges. The negative impact from increases in commodity prices and diminished availability of rare earth minerals and noble gases might not be recovered through our product sales, which could have a material adverse effect on our results of operations and financial condition.

Changes in trade policies, such as increased import duties, could increase the costs of goods imported into the United States or China.

In March 2018, the United States announced new steel and aluminum tariffs. Then, in July 2018, the United States imposed increased tariffs on products of Chinese origin, and China responded by increasing tariffs on U.S.-origin goods. On the export side, denial orders and placing companies on the U.S. Entity List could decrease our access to customers, suppliers, and markets and materially impact our revenues in the aggregate. In April 2018, for example, the U.S. Department of Commerce issued a denial order against two companies in the telecommunications market. In 2019 and 2020, the U.S. Department of Commerce placed a number of entities on the U.S. Entity List. If we cannot obtain relief from, or take other action to mitigate the impact of, these additional duties and restrictions and duties, our business and profits may be materially and adversely affected. Further changes in the trade policy of the United States or of other countries in which we do cross-border business, or additional sanctions, could result in retaliatory actions by other countries that could materially and negatively impact the volume of economic activity in the United States or globally, which, in turn, may decrease our access to customers and markets, reduce our revenues, and increase our operating costs.

Our association with customers that are or become subject to U.S. regulatory scrutiny or export restrictions could negatively impact our business and create instability in our operations. Governmental actions such as these could subject us to actual or perceived reputational harm among current or prospective investors, suppliers or customers, customers of our customers, other parties doing business with us, or the general public. Any such reputational harm could result in the loss of investors, suppliers, or customers, which could harm our business, financial condition, operating results, or prospects.

Exports of certain of our products are subject to export controls imposed by the U.S. government and administered by the U.S. Departments of State and Commerce. In certain instances, these regulations may require pre-shipment authorization from the administering department. For products subject to the Export Administration Regulations (EAR), administered by the Department of Commerce's Bureau of Industry and Security, the requirement for a license is dependent on the type and end use of the product, the final destination, the identity of the end user, and whether a license exception might apply. Virtually all exports of products subject to the International Traffic in Arms Regulations (ITAR), administered by the Department of State's Directorate of Defense Trade Controls, require a license. Certain of our products are subject to EAR controls.

Additionally, certain other products that we sell, including certain products developed with government funding, are subject to ITAR. Products developed and manufactured in our foreign locations are subject to export controls of the applicable foreign nation. Given the current global political climate, obtaining export licenses can be difficult and time-consuming. Failure to obtain export licenses for these shipments, or having one or more of our customers be restricted from receiving exports from us, could significantly reduce our revenue and materially adversely affect our business, financial condition, and results of operations. Compliance with regulations of the United States and other governments also subjects us to additional fees and costs. The absence of comparable restrictions on competitors in other countries may adversely affect our competitive position.

A widespread health crisis could materially and adversely affect our business, financial condition, and results of operations.

The outbreak of a widespread health crisis, whether global in scope or localized in an area in which we, our customers or our suppliers do business, could have a material adverse effect on our operations and the operations of our suppliers and customers. Potential impacts on our operations include:

- significant reductions in demand for one or more of our products or a curtailment to one or more of our product lines caused by, among other things, any temporary inability of our customers to purchase and utilize our products in next-stage manufacturing due to shutdown orders or financial hardship;
- workforce constraints triggered by any applicable shutdown orders or stay-at-home polices;
- disruptions to our third-party manufacturing and raw materials supply arrangements caused by constraints over our suppliers' workforce capacity, financial, or operational difficulties;
- disruption in our own ability to produce and ship products, including components we use in the production of other products;
- heightened risk and uncertainty regarding the loss or disruption of essential third-party service providers, including transportation services, contract manufacturing, marketing, and distribution services;
- requirements to comply with governmental and regulatory responses such as quarantines, import/export restrictions, price controls, or other governmental or regulatory actions, including closures or other restrictions that limit or close our operating and manufacturing facilities, restrict our workforce's ability to travel or perform necessary business functions, or otherwise impact our suppliers or customers, which could adversely impact our operating results; and
- increased operating expenses and potentially reduced efficiency of operations.

The implementation of health and safety practices by us or our suppliers, distributors or customers could impact customer demand, supplier deliveries, our productivity, and costs, which could have a material adverse impact on our business, financial condition and results of operations.

Global economic downturns may adversely affect our business, operating results, and financial condition.

Current and future conditions in the global economy have an inherent degree of uncertainty. As a result, it is difficult to estimate the level of growth or contraction of the global economy as a whole. It is even more difficult to estimate growth or contraction in various parts, sectors, and regions of the economy, including the industrial, communications, electronics and instrumentation markets in which we participate. All aspects of our forecasts depend on estimates of growth or contraction in the markets we serve. Thus, prevailing global economic uncertainties render estimates of future income and expenditures very difficult to make.

Global economic downturns may affect industries in which our customers operate. These changes could include decreases in the rate of consumption or use of our customers' products. Such conditions could have a material adverse effect on demand for our customers' products and, in turn, on demand for our products.

Adverse changes may occur in the future as a result of declining or flat global or regional economic conditions, fluctuations in currency and commodity prices, wavering confidence, capital expenditure reductions, unemployment, decline in stock markets, contraction of credit availability, or other factors affecting economic conditions. For example, factors that may affect our operating results include disruption in the credit and financial markets in the United States, Europe, and elsewhere, adverse effects of slowdowns in the U.S., European, Chinese or other Asian economies, reductions or limited growth in consumer spending or consumer credit, global trade tariffs, and other adverse economic conditions that may be specific to the Internet, e-commerce, and payments industries.

These changes may negatively affect sales of products and increase exposure to losses from bad debt and commodity prices, the cost and availability of financing, and costs associated with manufacturing and distributing products. Any economic downturn could have a material adverse effect on our business, results of operations, or financial condition.

Foreign currency risk may negatively affect our revenues, cost of sales, and operating margins, and could result in foreign exchange losses.

We conduct our business and incur costs in the local currency of most countries in which we operate. We incur currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a different currency from the currency in which it operates, or holds assets or liabilities in a currency different from its functional currency. Changes in exchange rates can also affect our results of operations when the value of sales and expenses of foreign subsidiaries are translated to U.S. dollars. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations. Further, given the volatility of exchange rates, we may not be able to effectively manage our currency risks, and any volatility in currency exchange rates may increase the price of our products in local currency to our foreign customers or increase the manufacturing cost of our products, either of which may have an adverse effect on our financial condition, cash flows, and profitability. We may incur losses related to foreign currency fluctuations, and foreign exchange controls may prevent us from repatriating cash in countries outside the United States.

Inflation and increased borrowing costs could impact our cash flows and profitability.

Prolonged periods of inflation have the potential to adversely affect our business, results of operations, financial condition and liquidity by increasing our overall cost structure, particularly if we are unable to achieve commensurate increases in the prices we charge our customers. The existence of inflation in the economy has and may continue to result in higher interest rates and capital costs, supply shortages, increased costs of labor and other similar effects. Further, world events such as the conflict between Russia and Ukraine could affect inflationary trends. As a result of inflation, we have experienced and may continue to experience, increases in our costs associated with operating our business including labor, equipment and other inputs. Additionally, our borrowing costs, including those under our current credit agreement, dated as of July 1, 2022, by and among us, the lenders and other parties thereto, and JP Morgan Chase Bank, NA, as administrative agent and collateral agent (as amended, restated, supplemented and/or otherwise modified from time to time, the "Credit Agreement"), increase or decrease (*i.e.*, "float") based on interest rate benchmarks. As governments increase interest rate benchmarks to combat inflation, our borrowing costs increase. Although we may take measures to mitigate the impact of this inflation through pricing actions, efficiency gains and interest rate hedging, if these measures are not effective to our business, results of operations, financial position and liquidity could be materially adversely affected. Even if such measures are effective, there could be a difference between the timing of when these beneficial actions impact our results of operations and when the cost of inflation is incurred.

Our current credit agreement and any other credit or similar agreements into which we may enter in the future may restrict our operations, particularly our ability to respond to changes or to take certain actions regarding our business.

Our Credit Agreement contains a number of restrictive covenants that may impose operating and financial restrictions on us and limit our ability to engage in acts that may be in our long-term best interest, including restrictions on our ability to incur indebtedness, grant liens, undergo certain fundamental changes, fund non-US operations, dispose of assets, make certain investments, enter into certain transactions with affiliates, and make certain restricted payments, in each case subject to limitations and exceptions set forth in the Credit Agreement.

The Credit Agreement also contains customary events of default that include, among other things, certain payment defaults, covenant defaults, cross-defaults to other indebtedness, change of control defaults, judgment defaults, and bankruptcy and insolvency defaults. Such events of default may allow the creditors to accelerate the related debt and may result in the acceleration of any other debt to which a cross-acceleration or cross-default provision applies, which could have a material adverse effect on our business, operations, and financial results. Furthermore, if we are unable to repay the amounts due and payable under the Credit Agreement, those lenders could proceed against the collateral granted to them to secure that indebtedness, which could force us into bankruptcy or liquidation. In the event that our lenders accelerate the repayment of the borrowings, we may not have sufficient assets to repay that indebtedness. Any acceleration of amounts due under the Credit Agreement would likely have a material adverse effect on us. As a result of these restrictions, we may be limited in how we conduct business, unable to raise additional debt or equity financing to operate during general economic or business downturns, or unable to compete effectively or to take advantage of new business opportunities.

In addition, we may enter into other credit agreements or other debt arrangements from time to time which contain similar or more extensive restrictive covenants and events of default, in which case we may face similar or additional limitations as a result of the terms of those credit agreements or other debt arrangements.

Any inability to access financial markets from time to time to raise required capital, finance our working capital requirements or our acquisition strategies, or otherwise support our liquidity needs could negatively impact our ability to finance our operations, meet certain obligations, or implement our growth strategy.

We from time to time borrow under our existing credit facility or use proceeds from sales of our securities to fund portions of our operations, including working capital investments and financing of our acquisition strategies. In the past, market disruptions experienced in the United States and abroad have materially impacted liquidity in the credit and debt markets, making financing terms for borrowers less attractive and, in certain cases, have resulted in the unavailability of certain types of financing. Uncertainty in the financial markets may negatively impact our ability to access additional financing or to refinance our existing debt arrangements on favorable terms or at all, which could negatively affect our ability to fund current and future expansion as well as future acquisitions and development. These disruptions may include turmoil in the financial services industry, volatility in the markets where our outstanding securities trade, and changes in general economic conditions in the areas where we do business. If we are unable to access funds at competitive rates, or if our short-term or long-term borrowing costs increase, our ability to finance our operations, meet our short-term obligations, and implement our operating strategies could be adversely affected.

In the future, we may be required to raise additional capital through public or private financing or other arrangements. Such financing may not be available on acceptable terms or at all, and our failure to raise capital when needed could harm our business and prospects. Additional equity financing may be dilutive to the holders of our outstanding capital stock, and debt financing, if available, may involve restrictive covenants that may limit our ability to undertake certain activities that we otherwise would find to be desirable. Further, debt service obligations associated with any debt financing could reduce our profitability. If we cannot raise funds on acceptable terms, we may not be able to grow our business or respond to competitive pressures.

There are limitations on the protection of our intellectual property, and we may from time to time be involved in costly intellectual property litigation or indemnification.

We rely on a combination of trade secret, patent, copyright, and trademark laws, combined with employee confidentiality, noncompetition, and nondisclosure agreements to protect our intellectual property rights. We cannot ensure that our employees with key knowledge will not be employed by our competitors. There can be no assurance that the steps we take will be adequate to prevent misappropriation of our technology or intellectual property. Furthermore, there can be no assurance that third parties will not assert infringement claims against us in the future.

Asserting our intellectual property rights or defending against third-party claims could involve substantial expense. In the event that a third party were successful in a claim that one of our products or processes infringed its proprietary rights, we could be required to pay substantial damages or royalties, or spend substantial amounts in order to obtain a license or modify our products or processes so that they no longer infringe such proprietary rights. Any such event could have a material adverse effect on our business, results of operations, or financial condition.

The design, processes, and specialized equipment utilized in our engineered materials, advanced components, and subsystems are innovative, complex, and difficult to duplicate. However, there can be no assurance that others will not develop or patent similar technology, or that all aspects of our proprietary technology will be protected. Others have obtained patents covering a variety of materials, devices, equipment, configurations, products, and processes, and others could obtain patents covering technology similar to ours. We may be required to obtain licenses under such patents, and there can be no assurance that we would be able to obtain such licenses, if required, on commercially reasonable terms, or that claims regarding rights to technology will not be asserted that may adversely affect our results of operations. In addition, our research and development contracts with agencies of the U.S. government present a risk that project-specific technology could be disclosed to competitors as contract reporting requirements are fulfilled. We also enter development projects from time to time that might result in intellectual property developed during a project that is assigned to the other party without us retaining rights to that intellectual property or is jointly owned with the other party.

Our global operations are subject to complex and rapidly changing legal and regulatory requirements.

We manufacture products in numerous countries worldwide. Operations inside and outside of the United States are subject to many legal and regulatory requirements, some of which are not aligned with others. These include tariffs, quotas, taxes and other market barriers, restrictions on the export or import of technology, potentially limited intellectual property protection, import and export requirements and restrictions, anti-corruption and anti-bribery laws, foreign exchange controls and cash repatriation restrictions, foreign investment rules and regulations, financial accounting and reporting rules and regulations, competition laws, employment and labor laws, pensions and social insurance, and environmental health and safety laws and regulations. We are also subject to a number of laws, rules, regulations, and reporting requirements regarding cybersecurity, data privacy, data residency, data localization, and artificial intelligence, and other data processing activities, which are rapidly evolving in the United States and in many other jurisdictions in which we operate.

Compliance with the myriad of global laws and regulations to which we are subject can be onerous and expensive, and requirements differ among jurisdictions. New laws, changes in existing laws, and abrogation of local regulations by national laws also result in significant uncertainties in how they will be interpreted and enforced. Failure to comply with any of these United States and/or foreign laws and regulations could have a material adverse effect on our business, results of operations, or financial condition.

Given the size, nature and complexity of our business and the extensive and varying nature of the global legal and regulatory requirements to which we are subject, we are particularly susceptible to investigations, claims, disputes, enforcement actions, prosecutions, litigation and other legal proceedings that could ultimately be resolved against us. We are and may become subject to legal proceedings globally (including criminal, civil and administrative) across a broad range of matters, including, but not limited to intellectual property claims, employment matters, contractual disputes, etc. These matters can result in settlements, administrative, civil or criminal fines, penalties or other sanctions, monetary damages awards, non-monetary relief, and other liabilities; and they could also damage our reputation and make it significantly more difficult for use to compete and generate new business and sales contracts.

Investigations, claims, disputes, enforcement actions, litigation or other legal proceedings could have a material adverse effect on our business, results of operations, or financial condition.

We may face particular data privacy and security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data.

We may face particular privacy, security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data in the jurisdictions in which we operate or do business, including, for example, the European Union's EU General Data Protection Regulation ("GDPR") the California Consumer Privacy Act (as amended by the California Privacy Rights Act of 2020) (the "CCPA"), China's Personal Information Protection Law, Data Security Law and Cybersecurity Law (together, "China DP Law"), as well as newly enacted or amended privacy and data protection laws, such as the India Digital Personal Data Protection Act 2023 (the "DPDP Act"), Vietnam's Decree No. 13/2023/ND-CP on the Protection of Personal Data (the "PDPD"), South Korea's Personal Information Protection Act (as amended in 2023) (the "PDPL"). Privacy, cybersecurity and data protection laws are rapidly developing and evolving and associated regulatory, enforcement and litigation trends and risks continue to evolve as well. Compliance with global privacy and security laws and regulations, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business.

Further, the obligations and requirements we are subject to vary, and in some cases may conflict, under global privacy, cybersecurity and data protection laws. While we have taken significant measures to minimize the risks of enforcement and privacy-related claims, comply with data protection laws, and implement safeguards and compliance measures for cross-border data transfers, given the shifting compliance and enforcement landscape, the geographic scope of our business, and the varying laws and legal obligations to which we are subject, we may face threatened or actual enforcement actions and other claims related to our compliance with applicable privacy, cybersecurity and data protection laws.

Violations of these privacy, cybersecurity, and data protection laws may be subject to significant penalties and damages. For example, failure to comply with GDPR requirements is subject to fines of up to 20 million Euro or 4% of global annual revenues, whichever is higher. In addition, we could be subject to actual or threatened class actions under certain laws, such as the (which provides a private right of action to individuals for certain data breaches) and the California Information Privacy Act.

The costs of compliance with privacy, cybersecurity and data protection laws continue to increase as do the risks of enforcement, and cumulatively the impact of these could have a material effect on our business, results of operations, or financial condition.

Cybersecurity attacks and incidents and other vulnerabilities could subject us to costly damages, claims and expenses, harm to our reputation or competitive position, or disrupt our operations and business.

We depend on secure information technology for our business and are exposed to risks related to cybersecurity threats and other cyber incidents affecting our operations, facilities, systems and networks, and those of our customers, suppliers and service providers, and other third parties.

We have experienced cybersecurity incidents and some of these have resulted in data breaches. Thus far, none of these incidents or breaches have materially affected our ability to conduct our business, our results of operations, or our financial condition. However, we continue to face cyber and other security threats. Particularly in light of the nature of our industry, size of our company and workforce, reliance on third party suppliers and information technology and the global scope of our operations, we expect we will be subject to additional cyber-attacks and other security incidents in the future, including from nation states and non-state actors. While we continue to invest in the cybersecurity and resiliency of our networks and to enhance our internal controls and processes designed to help protect our systems and infrastructure, and the information they contain, given the complex, ongoing, and evolving nature of cyber and other security threats, these efforts may not be fully effective, particularly against previously unknown vulnerabilities and third party risks that go undetected for an extended period of time.

Our information technology and cybersecurity program also incorporate and rely on technology, products and services that are provided by service providers and other third parties ("third parties"), which means that Company is susceptible to certain vulnerabilities, outages and other incidents impacting these third parties and the technology, products and services they provide ("third party technology"). Further, our customers, vendors and other service providers also rely on third-party technology, which means that we may also be impacted by incidents affecting the third-party technology that our customers, vendors and service providers use and rely on. In some cases our customers, vendors and other service providers may rely on the same third-party technology as we do, which means that outages, errors and other incidents impacting third parties and third party technology can impact both us, as well as our customers, vendors and service providers, which can have a compounding effect.

Cyber events (including cybersecurity incidents, breaches, outages and other incidents), if not prevented or effectively mitigated, have caused and could cause harm and require remedial actions. They could also damage our reputation, disrupt performance, impact our ability to obtain future insurance coverage, and lead to loss of business, regulatory actions, liabilities or other financial losses, for which we do not have adequate sources of recovery. The occurrence and impact of these various risks are difficult to predict, but one or more of them could have a material adverse effect on our business, results of operations, or financial condition.

Data breaches and other events and incidents that impact the confidentiality, availability, and integration of information and assets could disrupt our operations, subject us to legal claims, and impact our financial results.

In the course of our business, we collect and store sensitive data, including intellectual property (both our own and that of our customers) and other proprietary business information, as well as personal and confidential data regarding our employees, vendors, partners, customers and other business contacts, and other regulated or protected data. Security breaches and other incidents impacting our network, systems or data, including physical or electronic break-ins, vendor service outages, computer viruses, attacks by hackers or similar breaches can create system disruptions, shutdowns and unauthorized disclosure of confidential information. We could be subject to service outages or breaches of security that result in unauthorized access to, use, disclosure, acquisition or processing of sensitive data or other assets, and other incidents that lead to the corruption, misappropriation or loss, or otherwise impact the availability of, sensitive data or assets. If we are unable to prevent or fully mitigate the risks or potential harm from such incidents or breaches, our operations could be disrupted or we could suffer legal claims, loss of reputation, financial loss, loss of contracts or business opportunities, property damage, or regulatory penalties.

In addition, some of the privacy, cybersecurity and data protection laws that we are subject to require that we report data breaches and other cybersecurity incidents to regulators and impacted individuals, including incidents occurring or impacting our vendors and service providers. For example, in the EU, the GDPR, and in the United States, all fifty states and certain federal regulations, require notice or reporting of certain breaches of personal data. In addition, some laws including certain U.S. federal laws and regulations, require reporting of certain cybersecurity incidents regardless of whether a data breach has occurred. In some cases, breaches and incidents may be reported to multiple regulators and public bodies, which can lead to increased risks of regulatory scrutiny, enforcement actions, reputational harm and other adverse impacts to our business.

We use and generate potentially hazardous substances that are subject to stringent environmental and safety regulations.

Hazardous substances used or generated in some of our research and manufacturing facilities are subject to stringent environmental and safety regulations. We believe that our handling of such substances is in material compliance with applicable environmental, safety, and health regulations at each operating location. We invest substantially in facility and infrastructure design, proper personal protective equipment and process controls, including specialized monitoring equipment and training, to minimize risks to our facilities, employees, surrounding communities, and the environment that could result from the presence and handling of such hazardous substances. When exposure problems or potential exposure problems have been uncovered, corrective actions have been implemented, and re-occurrence has been minimal or nonexistent.

We have in place emergency response plans with respect to our generation and use of the hazardous gases, which include hydrogen selenide, hydrogen sulfide, arsine, phosphine, and silane. Special attention has been given to all procedures pertaining to these gaseous materials to minimize the chance of accidental release into the atmosphere and to provide for an integrated system for monitoring and mitigating risk.

With respect to the manufacturing, use, storage, and disposal of the low-level radioactive material thorium fluoride, our United States facilities and procedures have been inspected and licensed by the Nuclear Regulatory Commission. Thorium-bearing by-products are collected and shipped as solid waste to a government-approved low-level radioactive waste disposal site in Clive, Utah.

The generation, use, collection, storage, and disposal of all other hazardous by-products, such as suspended solids containing heavy metals or airborne particulates, are believed by us to be in material compliance with regulations. We believe that we have obtained all of the permits and licenses required for operation of our business.

From time to time new regulations are enacted, and it is difficult to anticipate how such regulations will be implemented and enforced. We continue to evaluate the necessary steps for compliance with regulations as they are enacted. The implementation of such regulations may require us to incur additional costs and expend internal resources.

Although we do not know of any material environmental, safety, or health problems in our properties, processes, or products, there can be no assurance that problems will not develop in the future that could have a material adverse effect on our business, results of operations, or financial condition.

We have a substantial amount of debt, which could adversely affect our business, financial condition, or results of operations and prevent us from fulfilling our debt-related obligations.

As of June 30, 2024, we had approximately $4.1 billion of outstanding indebtedness on a consolidated basis, including under (i) our $850 million senior secured term loan A facility (the "Term A Facility"), (ii) our $2.8 billion senior secured term loan B facility (the "Term Loan B Facility", and together with the Term A Facility, the "Senior Credit Facilities") and (iii) our $990 million 5.000% senior notes due 2029 (the "2029 Notes"). Additionally, we have $346 million of undrawn capacity under our senior secured revolving credit facility (the "Revolving Credit Facility"). We may also incur additional indebtedness in the future by entering into new financing arrangements. Our indebtedness could have important consequences for us, including:

- making it difficult for us to satisfy all of our obligations with respect to our debt, or to our trade or other creditors;
- increasing our vulnerability to adverse economic or industry conditions;
- limiting our ability to obtain additional financing to fund capital expenditures and acquisitions, particularly when the availability of financing in the capital markets is limited;
- requiring us to pay higher interest rates upon refinancing or on our variable-rate indebtedness if interest rates rise;
- requiring a substantial portion of our cash flows from operations and the proceeds of any capital markets offerings or loan borrowings for the payment of interest on our debt and reducing our ability to use our cash flows to fund working capital, capital expenditures, acquisitions, and general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate; and
- placing us at a competitive disadvantage to less leveraged competitors.

We may not generate sufficient cash flow from operations, together with any future borrowings, to enable us to pay our indebtedness or to fund our other liquidity needs. We may need to refinance all or a portion of our indebtedness, on or before its maturity. We may not be able to refinance any of our indebtedness on commercially reasonable terms or at all. In addition, we may incur additional indebtedness in order to finance our operations, fund acquisitions, or repay existing indebtedness. If we cannot service our indebtedness, we may have to take actions such as selling assets, pursuing sales of additional debt or equity securities, or reducing or delaying capital expenditures, strategic acquisitions, investments, or alliances. Any such actions, if necessary, may not be able to be effected on commercially reasonable terms or at all, or on terms that would be advantageous to our stockholders, or on terms that would not require us to breach the terms and conditions of our existing or future debt agreements.

The agreements that govern our senior credit facilities and our 5.000% senior notes due 2029 contain various covenants that impose restrictions on our business, which may affect our ability to operate our businesses.

The Credit Agreement and the Indenture, dated as of December 10, 2021 (as amended, restated, supplemented and/or otherwise modified from time to time, the "Indenture"), which provides for the 2029 Notes, contain various affirmative and negative covenants that will, subject to certain significant exceptions, restrict our ability to, among other things, have liens on our property, incur additional indebtedness, enter into sale and lease-back transactions, make loans, advances or other investments, make non-ordinary course asset sales, declare or pay dividends or make other distributions with respect to equity interests, and/or merge or consolidate with any other person or sell or convey certain of our assets to any one person, among other things.

In addition, the Term Loan A Facility and Revolving Credit Facility require that the Company maintain (i) a maximum total net leverage ratio, as defined in the New Credit Agreement, of 4.00 to 1.00 from December 31, 2023 through maturity and (ii) an interest coverage ratio, as defined in the Credit Agreement, of at least 2.50 to 1.00.

Our ability to comply with these provisions may be affected by events beyond our control. Failure to comply with these covenants could result in an event of default, which, if not cured or waived, could accelerate our repayment obligations under the Credit Agreement or the Indenture, as applicable. If such indebtedness is accelerated, there can be no assurance that we will have sufficient financial resources or that we will be able to arrange financing to repay our borrowings at such time.

Unfavorable changes in tax rates, tax liabilities, or tax accounting rules could negatively affect future results.

As a global company, we are subject to taxation in the United States and various other countries and jurisdictions. As such, we must exercise a level of judgment in determining our worldwide tax liabilities. Our future tax rates could be affected by changes in the composition of earnings in countries with differing tax rates or changes in tax laws as well as changes in our current or future global corporate structure, including our integration of existing and acquired legal entities. Changes in tax laws or tax rulings may have a significantly adverse impact on our effective tax rate, including the "Inflation Reduction Act of 2022" and the two-pillar solution for a global minimum level of taxation by the Organization for Economic Co-operation and Development ("OECD"). We are also impacted by the establishment or release of valuation allowances against deferred tax assets, changes in generally accepted accounting principles and continued eligibility for tax holiday benefits.

The enactment of the Tax Cuts and Jobs Act (the "Tax Act") in December 2017 significantly affected U.S. tax law by changing how the United States imposes tax on multinational corporations. The U.S. Department of Treasury has broad authority under the Tax Act to issue regulations and interpretive guidance. We have applied available guidance to estimate our tax obligations, but new guidance issued by the U.S. Treasury Department may cause us to make adjustments to our tax estimates in future periods.

In addition, we are subject to regular examination of our income tax returns by the U.S. Internal Revenue Service and other tax authorities. This includes challenges to our intercompany transfer pricing arrangements and charges and the appropriate level of profitability for our entities. The various tax authorities may also challenge recent legal entity restructuring and integration undertaken to facilitate cost reductions and the increased efficiency of our business and finance activities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations and Competent Authority processes to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different from the treatment reflected in our historical income tax provision and accruals, which could materially and adversely affect our business, results of operations, or financial condition.

Natural disasters or other global or regional catastrophic events could disrupt our operations, give rise to substantial environmental hazards, and adversely affect our results.

We may be exposed to business interruptions due to extreme weather caused by climate change and deforestation, force majeure catastrophes, natural disasters, (including, but not limited to, droughts; earthquakes; flooding; heavy rains; landslides; rotating storms like cyclones, hurricanes, tornados, and typhoons; tsunamis and other giant waves; wildfires and volcanic eruptions), pandemic, terrorism, or acts of war that are beyond our control. Disruptions to our facilities or systems, or to those of our key suppliers, could also interrupt operational processes and adversely impact our ability to manufacture our products and provide services and support to our customers. As a result, our business, results of operations, or financial condition could be materially adversely affected.

A portion of our research and development activities, manufacturing, and other critical business operations are located near major earthquake faults, for example in Santa Clara, California, an area with a history of seismic events. Other business operations are located in regions which could be effected by any future increases in sea levels or in the frequency or severity of heavy rains, rotating and other storms, tsunamis and other giant waves, landslides and flooding including, but not limited to, China, Korea, Vietnam, and the coastal regions of the United States including, but not limited to, California and Florida. Any such loss or detrimental impact to any of our operations, logistics or facilities could disrupt our operations, delay production, shipments and revenues and result in large expenses to repair or replace the facility. While we have obtained insurance to cover most potential losses, after reviewing the costs and limitations associated with earthquake insurance, we have decided not to procure such insurance. We believe that this decision is consistent with decisions reached by numerous other companies located nearby. We cannot ensure you that our existing insurance coverage will be adequate against all other possible losses.

Delays in transportation of products and possible shortages of critical raw materials, parts, equipment and other resources may adversely affect our results of operations.

Current challenges in global shipping and other aspects of commercial transportation, such as congestion in ports, a shortage in containers and a general lack of space on ships and trucks, have adversely impacted our operations. Because of this ongoing situation, we face a risk of continued supply chain disruptions. Additionally, our revenues and collections also may be adversely affected by transportation delays that could have a negative impact on the timing of payments that we receive under our sales arrangements. If these issues continue beyond the short term, our overall supply chain and our revenues derived from our sales flow could be adversely impacted.

Our success requires us to attract, retain, and develop key personnel and maintain good relations with our employees.

We are highly dependent upon the experience and continuing services of certain scientists, engineers, production, sales, and management personnel. Competition for the services of these personnel is intense. There can be no assurance that we will be able to retain or attract the personnel necessary for our success. The loss of the services of our key personnel could have a material adverse effect on our business, results of operations, or financial condition. Our failure to execute on our succession planning may affect our ability to maintain our differentiated knowledge base.

We contract with a number of large end-user service providers and product companies that have considerable bargaining power, which may require us to agree to terms and conditions that could have an adverse effect on our business or ability to recognize revenues.

Large end-user service providers and product companies comprise a significant portion of our customer base. These large customers generally have greater purchasing power than smaller customers and, accordingly, often negotiate more favorable terms from suppliers, including us. As we seek to expand our sales to existing and new large customers, we may be required to agree to terms and conditions that are more favorable to these customers and that may affect the timing of our ability to recognize revenue, increase our costs, and have an adverse effect on our business, results of operations and financial condition. Furthermore, large customers have increased buying power and ability to negotiate onerous terms into our contracts with them, including pricing, warranties, indemnification and production capability terms. If we are unable to satisfy the terms of these contracts, it could result in liabilities of a material nature, including litigation, damages, additional costs, loss of market share, and loss of reputation. Additionally, the terms these large customers require, such as most-favored customer or exclusivity provisions, may impact our ability to do business with other customers and generate revenues from such customers.

The adoption of new climate change regulations may result in increased financial costs and/or losses.

In many of the countries in which we operate, government bodies are increasingly enacting legislation and regulations in response to potential impacts of climate change. These laws and regulations have the potential to impact our operations directly or indirectly as a result of required compliance by our customers and/or suppliers. Inconsistency of regulations may also affect the costs of compliance with such laws and regulations. Assessments of the potential impact of future climate change legislation, regulation, and international treaties and accords are uncertain, given the wide scope of potential regulatory change in countries in which we operate.

We may incur increased capital expenditures resulting from required compliance with revised or new legislation or regulations, added costs to purchase raw materials, lower profits from sales of our products, allowances or credits under a “cap and trade” system, increased insurance premiums and deductibles as new actuarial tables are developed to reshape coverage, changes in competitive position relative to industry peers, changes to profit or loss arising from increased or decreased demand for goods produced by us, or changes in costs of goods sold.

Some of our business units depend from time to time on large purchases from a few large customers, and any loss, cancellation, reduction, or delay in purchases by these large customers could harm the longevity of the business.

A small number of customers have consistently accounted for a significant portion of our revenues, with one customer contributing more than 10% of total revenues in fiscal 2024. Our success will depend on our continued ability to develop and manage relationships with our large customers and their continued need for our products. Although we are attempting to expand our customer base, we expect that significant customer concentration will continue for the foreseeable future. We may not be able to offset any decline in revenues from our existing large customers with revenues from new customers, and our quarterly results may be volatile because we are dependent on large orders from these customers that may be reduced, delayed, or cancelled. The markets in which we have historically sold our optical subsystems and components products are dominated by a relatively small number of systems manufacturers, thereby limiting the number of our potential customers.

Our dependence on large orders from a relatively small number of large customers makes our relationship with each large customer critically important to our business. We cannot ensure that we will be able to retain our large customers, attract additional large customers, or that our large customers will be successful in selling their products that incorporate our products. In addition, governmental trade action or economic sanctions may limit or preclude our ability to do business with certain large customers. We have in the past experienced delays and reductions in orders from some of our large customers. In addition, our large customers have in the past sought price concessions from us, and we expect that they will continue to do so in the future. Cost and expense reduction measures that we have implemented over the past several years, and additional action we are taking to reduce costs, may adversely affect our ability to introduce new and improved products, which may, in turn, adversely affect our relationships with some of our large customers. Further, some of our large customers may in the future shift their purchases of products from us to our competitors or to joint ventures between these customers and our competitors, or may in certain circumstances produce competitive products themselves. The loss of one or more of our large customers, any reduction or delay in sales to these customers, our inability to successfully develop relationships with additional customers, or future price concessions that we may make could significantly harm our business.

Actions that we are taking to restructure our business in alignment with our strategic priorities may not be as effective as anticipated.

In May 2023, we announced that our Board of Directors approved a restructuring plan (the "Restructuring Plan") which includes site consolidations, facilities movements and closures, and the relocation and requalification of certain manufacturing facilities. While the Restructuring Plan and other proactive cost reduction measures that we plan to take are intended to realign our cost structure as part of a transformation to a simpler, more streamlined, resilient and sustainable business model, we may encounter challenges in the execution of these efforts that could prevent us from recognizing the intended benefits of such efforts.

As a result of the Restructuring Plan, we expect to incur approximately $175 million to $200 million of pre-tax charges in the fiscal years 2023 to 2025 primarily as a result of the reduction in force and facility consolidations related to the closure and relocation of sites. We also have incurred, and may continue to incur, additional costs in the near term, including cash payments related to severance, employee benefits and employee transition costs, as well as non-cash charges for share-based compensation expense.

The Restructuring Plan may result in other unintended consequences, including higher than anticipated costs in implementing planned workforce reductions, particularly in highly regulated locations outside the United States; higher than anticipated lease termination and facility closure costs; employee attrition beyond our intended reduction in force; and decreased employee morale among our remaining employees; diversion of management attention; adverse effects to our reputation as an employer which could make it more difficult for us to hire new employees in the future; loss of the institutional knowledge and expertise of departing employees; failure to maintain adequate controls and procedures while executing, and subsequent to completing, the Restructuring Plan; and potential failure or delays to meet operational and growth targets due to the loss of qualified employees.

If we experience any of these adverse consequences, the Restructuring Plan and other cost reduction initiatives that we may undertake may not achieve or sustain the intended benefits. Our failure to achieve the expected results from the Restructuring Plan and other cost reduction initiatives for any reason also could lead to the implementation of additional restructuring-related activities in the future, which may exacerbate these risks or introduce new risks which could adversely affect our business, results of operations and financial condition.

We are subject to a number of risks associated with the equity investments contemplated by the respective investment agreements entered into with Denso Corporation and Mitsubishi Electric Corporation and certain related supply arrangements, and these risks could adversely impact our operations, financial condition and business.

On October 10, 2023, Silicon Carbide LLC ("Silicon Carbide"), a wholly owned subsidiary of the Company, entered into (i) an investment agreement (the "Denso Investment Agreement") with Denso Corporation ("Denso") pursuant to which Silicon Carbide issued and sold to Denso 16,666,667 Class A Common Units of Silicon Carbide ("Common Units") for an aggregate purchase price of $500,000,000, and (ii) an investment agreement (together with the Denso Investment Agreement, the "Investment Agreements") with Mitsubishi Electric Corporation ("MELCO") pursuant to which Silicon Carbide issued and sold to MELCO 16,666,667 Common Units for an aggregate purchase price of $500,000,000 (the issuance and sale of the Common Units to Denso and MELCO, collectively the "Equity Investments"). Following the Equity Investments and as of June 30, 2024, the Company owns approximately 75% of Silicon Carbide's outstanding Common Units, Denso owns approximately 12.5% of the outstanding Common Units and MELCO owns approximately 12.5% of the outstanding Common Units. In connection with the entrance into the Investment Agreements, Silicon Carbide also entered into certain supply arrangements with each of MELCO and Denso pursuant to which Silicon Carbide will supply 150 mm and 200 mm silicon carbide substrates and epitaxial wafers.

We are subject to a number of risks associated with this transaction, including risks associated with:

- the separation of our silicon carbide business in accordance with the terms of the Investment Agreements;
- unfavorable reaction to the Equity Investments by customers, competitors, suppliers and employees;
- the disruption to and uncertainty in our silicon carbide business and our relationships with our customers, including attempts by our customers to terminate or renegotiate their relationships with us or decisions by our customers to defer or delay purchases from us; and
- difficulties in hiring, retaining and motivating key personnel as a result of uncertainties generated by this process or any developments or actions relating to it.

As a result of these risks, we may be unable to realize the anticipated benefits of the Equity Investments and related supply arrangements. Our failure to realize the anticipated benefits of the Equity Investments and related supply arrangements would adversely impact our operations, financial condition and business and could limit our ability to pursue additional strategic transactions.

Our operations may be adversely affected if we are unable to manufacture certain products in our manufacturing facilities.

We manufacture some of the components that we incorporate into our subsystem products; in other cases, we provide components to contract manufacturers to produce finished or intermediary goods. For some of the components and finished or intermediary goods, we are the sole qualified manufacturer. Our manufacturing processes are highly complex, and quality issues are often difficult to forecast, detect, and correct. From time to time we have experienced problems achieving acceptable yields in our manufacturing facilities, resulting in delays in the availability of our products. In addition, if we experience problems with our manufacturing facilities, it would be costly and require a long period of time to move the manufacture of these components and finished good products to a different facility or contract manufacturer, which could result in interruptions in supply and would likely materially impact our results of operations and financial condition. In addition, for a variety of reasons, including changes in circumstances at our contract manufacturers or our own business strategies, we may voluntarily, or be required to, transfer the manufacturing of certain products to other manufacturing sites.

Changes in manufacturing processes are often required due to changes in product specifications, yield improvements, changing customer needs, and the introduction of new products. These changes may reduce manufacturing yields at our contract manufacturers and at our own manufacturing facilities, resulting in reduced margins on and/or reduced availability of those products. Also, our ability to control the quality of products produced by contract manufacturers may be limited and quality issues may not be resolved in a timely manner, which could adversely impact our financial condition or results of operations. In addition, many of our products are sourced from suppliers based outside of the United States, primarily in Asia. Uncertainty with respect to tax and trade policies, tariffs, and government regulations affecting trade between the United States and other countries has recently increased. Major developments in tax policy or trade relations, such as the imposition of tariffs on imported products, could increase our product and product-related costs or require us to seek alternative suppliers, either of which could result in decreased sales or increased product and product-related costs.

Failure to accurately forecast our customer demands and our resulting revenues could result in additional charges for obsolete or excess inventories or noncancellable purchase commitments.

We base many of our operating decisions including, but not limited to, those regarding manufacturing capacity and staffing, and enter into purchase commitments, on the basis of anticipated revenue trends that are highly unpredictable. Some of our purchase commitments are not cancellable, and in some cases we are required to recognize a charge representing an amount of material or capital equipment purchased or ordered that exceeds our actual requirements. Should revenues in future periods fall substantially below our expectations, or should we fail to accurately forecast changes in demand mix, we could be required to record substantial charges for obsolete or excess inventories or noncancellable purchase commitments.

Our markets are unpredictable and characterized by rapid technological changes and evolving standards demanding a significant investment in research and development, and, if we fail to address changing market conditions, our business and operating results will be harmed.

Our markets are characterized by extensive research and development, rapid technological change, frequent new product introductions, changes in customer requirements and evolving industry standards. Because this industry is subject to rapid change, it is difficult to predict its potential size or future growth rate. Our success in generating sales in this industry will depend on, among other things:

- maintaining and enhancing our relationships with our customers;
- the education of potential end-user customers about the benefits of lasers and laser systems; and
- our ability to accurately predict and develop our products to meet industry standards.

We cannot ensure you that our expenditures for research and development will result in the launch of new products or, if such products are introduced, that those products will achieve sufficient market acceptance or to generate sales to offset the costs of development. Our failure to address rapid technological changes in our markets could adversely affect our business and results of operations.

If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.

Under accounting principles generally accepted in the United States, we review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Goodwill and indefinite life intangible assets are required to be tested for impairment at least annually. Factors that may be considered in determining whether a change in circumstances indicating that the carrying value of our goodwill or other intangible assets may not be recoverable include declines in our stock price and market capitalization or future cash flows projections. A decline in our stock price, or any other adverse change in market conditions, particularly if such change has the effect of changing one of the critical assumptions or estimates we used to calculate the estimated fair value of our reporting units, could result in a change to the estimation of fair value that could result in an impairment charge. Any such material charges, whether related to goodwill or purchased intangible assets, may have a material negative impact on our financial and operating results.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, the Sarbanes-Oxley Act of 2002, as amended ("the Sarbanes-Oxley Act"), and New York Stock Exchange ("NYSE") listing requirements. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight.

Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could delay the reporting of our financial results or cause us to be subject to investigations, enforcement actions by regulatory agencies, stockholder lawsuits, or other adverse actions requiring us to incur defense costs or pay fines, settlements, or judgments. Any such failures or difficulties could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock. We may also then become the target of activist investors. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the NYSE.

Risks Relating to Our Capital Stock

The trading prices for our common stock have been volatile in the past and may be volatile in the future.

The trading prices for our common stock varied between a high of $73.98 per share and a low of $28.92 per share in the fiscal year ended June 30, 2024. The market prices of our securities could fluctuate significantly for many reasons, including the following:

- future announcements by or concerning us or our competitors;
- the overall performance of equity markets;
- the trading volume of our securities;
- additions or changes to our Board of Directors, management, or key personnel;
- regulatory actions (including, but not limited to, developments in international trade policy) and enforcement actions bearing on manufacturing, development, marketing, or sales;
- the commencement or outcome of litigation;
- reports and recommendations of analysts and whether or not we meet the milestones, metrics, and other expectations set forth in such reports;
- gaining or losing large customers;
- the introduction of new products or services and market acceptance of such products or services;
- fluctuations in demand for our products or downturns in the industries that we serve, particularly the continued build-out of the capacity for the manufacture of OLED and the increased use of the installed base of our products in such manufacturing;
- the impact of any public health crisis on our business, financial condition, results of operations, or prospects or those of our customers and suppliers;
- the acquisition or loss of significant manufacturers, distributors, or suppliers or an inability to obtain sufficient quantities of materials needed to provide our services;
- the issuance of common stock or other securities (including shares of common stock issued upon conversion of any shares of Series B Preferred Stock);
- incurrence of indebtedness;
- quarterly variations in operating results;
- our ability to accurately forecast future performance;
- business acquisitions or divestitures;
- fluctuations in the economy, political events, or general market conditions; and
- changes in our operating industry generally.

In addition, stock markets have experienced extreme price and volume fluctuations in recent years. Moreover, these fluctuations frequently have been unrelated to the operating performance or underlying fundamentals of the affected companies. These broad market fluctuations, including fluctuations within our industry peer group, may adversely affect the market price of our common stock. These fluctuations may be unrelated to our performance or out of our control, and could lead to securities class action litigations that could result in substantial expenses and diversion of management's attention and corporate resources, any or all of which could adversely affect our business, financial condition, and results of operations.

Provisions in our Amended and Restated Articles of Incorporation and Amended and Restated Bylaws and the Pennsylvania Associations Code (the "Code") may delay or prevent our acquisition by a third party, which could also reduce the market price of our capital stock.

Our Articles of Incorporation and Bylaws contain provisions that could make us a less attractive target for a hostile takeover and could make more difficult or discourage a merger proposal, a tender offer, or a proxy contest. Such provisions include:

- a requirement that shareholder-nominated director nominees be nominated in advance of the meeting at which directors are elected and that specific information be provided in connection with such nomination;
- the ability of our Board of Directors to issue additional shares of common stock or preferred stock without shareholder approval; and
- certain provisions requiring supermajority approval (at least two-thirds of the votes cast by all shareholders entitled to vote thereon, voting together as a single class).

In addition, the Code contains provisions that may have the effect of delaying or preventing a change in our control or changes in our management. Many of these provisions are triggered if any person or group acquires, or discloses the intent to acquire, 20% or more of a corporation's voting power, subject to certain exceptions. These provisions:

- provide the other shareholders of the corporation with certain rights against the acquiring group or person;
- prohibit the corporation from engaging in a broad range of business combinations with the acquiring group or person;
- restrict the voting and other rights of the acquiring group or person; and
- provide that certain profits realized by the acquiring group or person from the sale of our equity securities belong to and are recoverable by us.

Regardless of the amount of a person's holdings, if a shareholder or shareholder group (including affiliated persons) would be a party to certain proposed transactions with us or would be treated differently from other shareholders of ours in certain proposed transactions, the Code requires approval by a majority of votes entitled to be cast by all shareholders other than the interested shareholder or affiliate group, unless the transaction is approved by independent directors or other criteria are satisfied. Furthermore, under the Code, a "short-form" merger of Coherent Corp. cannot be implemented without the consent of our Board of Directors.

In addition, as permitted by Pennsylvania law, an amendment to our Articles of Incorporation or other corporate action that is approved by shareholders may provide mandatory special treatment for specified groups of nonconsenting shareholders of the same class. For example, an amendment to our Articles of Incorporation or other corporate action may provide that shares of common stock held by designated shareholders of record must be cashed out at a price determined by the Company, subject to applicable dissenters' rights.

Furthermore, the Code provides that directors, in discharging their duties, may consider, to the extent they deem appropriate, the effects of any action upon shareholders, employees, suppliers, customers, and the communities in which the corporation's offices are located. Directors are not required to consider the interests of shareholders to a greater degree than other constituencies' interests. The Code expressly provides that directors do not violate their fiduciary duties solely by relying on "poison pills" or the anti-takeover provisions of the Code. We do not currently have a "poison pill."

All of these provisions may limit the price that investors may be willing to pay for shares of our capital stock.

In addition, if any of certain fundamental changes were to occur, we or the surviving entity would be required to make an offer to repurchase, at the option and election of the holders thereof, for cash each share of Series B Preferred Stock then outstanding. These features of the Series B Preferred Stock could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management.

We do not currently intend to pay dividends on our common stock; holders will benefit from an investment in our common stock only if it appreciates in value.

We have never declared nor paid dividends on our common stock and do not expect to pay cash dividends on our common stock in the foreseeable future. We currently anticipate that we will retain future earnings to support operations and to finance the development of our business. As a result, the success of an investment in our common stock will depend entirely upon future appreciation in its value. There is no guarantee that our common stock will maintain its value or appreciate in value.

Our ability to declare and pay dividends on our capital stock may be limited, including by the terms of our existing Credit Agreement.

Our declaration and payment of dividends on our capital stock in the future will be determined by our Board of Directors (or an authorized committee thereof) in its sole discretion and will depend on our financial condition, earnings, growth prospects, other uses of cash, funding requirements, applicable Pennsylvania law, and other factors our Board of Directors deems relevant.

The terms of the Credit Agreement contain a restriction on our ability to pay cash dividends on our capital stock. Credit facilities, indentures, or other financing agreements that we enter into in the future also may contain provisions that restrict or prohibit our ability to pay cash dividends on our capital stock.

In addition, under Pennsylvania law, our Board of Directors may not pay dividends if after giving effect to the relevant dividend payment we (i) would not be able to pay our debts as they become due in the usual course of our business or (ii) our total assets would not be greater than or equal to the sum of our total liabilities plus the amount that would be needed if we were to be dissolved at the time as of which the dividend is measured, in order to satisfy the preferential rights upon dissolution of shareholders whose preferential rights are superior to those receiving the dividend.

Our common stock is subordinate to our existing and future indebtedness, the Series B Preferred Stock, and any other preferred stock we may issue in the future. Our Series B Preferred Stock ranks junior to all of our and our subsidiaries' consolidated liabilities.

Shares of our common stock are equity interests that rank junior to all indebtedness and other non-equity claims on us with respect to assets available to satisfy our claims, including in a liquidation of the Company. Additionally, holders of our common stock may be subject to prior dividend and liquidation rights of any holders of our preferred stock or depositary shares representing such preferred stock then outstanding.

Our common stock ranks junior to our Series B Preferred Stock with respect to the payment of dividends and amounts payable in the event of our liquidation, dissolution, or winding-up of our affairs. This means that, unless accumulated dividends have been paid on all the Series B Preferred Stock then outstanding through the most recently completed dividend period, no dividends may be declared or paid on our common stock and we will not be permitted to repurchase any of our common stock, subject to limited exceptions. Likewise, in the event of our voluntary or involuntary liquidation, dissolution, or winding-up of our affairs, no distribution of our assets may be made to holders of our common stock until we have paid to holders of the Series B Preferred Stock then outstanding the applicable liquidation preferences.

In the event of a bankruptcy, liquidation, dissolution, or winding-up of our affairs, our assets will be available to pay obligations on the Series B Preferred Stock only after all of our consolidated liabilities have been paid. In addition, the Series B Preferred Stock ranks structurally junior to all existing and future liabilities of our subsidiaries. In the event of a bankruptcy, liquidation, dissolution, or winding-up of our affairs, there may not be sufficient assets remaining, after paying our and our subsidiaries' liabilities, to pay amounts due on any or all of the Series B Preferred Stock then outstanding.

Our Board of Directors can issue, without approval of the holders of our common stock, preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of our common stock, the rights of holders of shares of our capital stock, or the market price of our capital stock.

Our Articles of Incorporation authorize our Board of Directors to issue one or more additional series of preferred stock and set the terms of the preferred stock without seeking any further approval from our shareholders. Any preferred stock that is issued will rank ahead of our common stock in terms of dividends and liquidation rights. If we issue additional preferred stock, it may adversely affect the market price of our common stock. Our Board of Directors also has the authority, without shareholder approval, subject to applicable law, to set the terms of any such series of preferred stock that may be issued, including voting rights, dividend rights, preferences over our common stock with respect to dividends, and other terms, or upon our liquidation, dissolution, or winding-up of our affairs. If we issue additional preferred stock in the future that has a preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution, or winding-up of our affairs, or if we issue additional preferred stock with voting rights that dilute the voting power of our common stock, the rights of holders of our capital stock or the market price of our capital stock could be adversely affected. The issuance of preferred stock or even the ability to issue preferred stock could also have the effect of delaying, deterring, or preventing a change of control or other corporate action.

The redemption rights of the holders of Series B Preferred Stock may result in the use of our cash in such a way that could adversely affect our business, financial condition or results of operations.

At any time on or after the ten-year anniversary of the applicable issuance date of the shares of our Series B Preferred Stock and subject to the procedures set forth in the terms of the Series B Preferred Stock, each holder of such shares will have the right to require us to redeem all of such holder's shares for cash at a price per share equal to the sum of the applicable stated value for such shares plus accrued or declared and unpaid dividends on such shares that had not previously been added to such stated value. This may have the effect of reducing funds available for working capital, capital expenditures, acquisitions and other general corporate purposes, thereby negatively affecting the interests of holders of our other capital stock, including our common stock.

Holders of our Series B Preferred Stock can exercise significant control over us, which could limit the ability of holders of our other capital stock to influence the outcome of key transactions, including a change of control.

Our Series B Preferred Stock has voting rights, allowing holders to vote as one class with our common stock on an as-converted basis, subject to limited exceptions. As a result, the holders of Series B Preferred Stock have the ability to significantly influence the outcome of any matter submitted for the vote of the holders of our common stock. Holders of Series B Preferred Stock are entitled to act separately in their own respective interests with respect to their ownership interests in us and have the ability to substantially influence all matters that require approval by our shareholders, including the approval of significant corporate transactions. Additionally, we may not undertake certain actions without the prior written approval of the holders of a majority of the issued and outstanding shares of Series B Preferred Stock, voting separately from our common stock. Subject to certain exceptions, we must not: (1) alter or change the rights, preferences or privileges of our Series B Preferred Stock or amend, modify or supplement any provision of our organizational documents in a manner that adversely affects the rights, powers, preferences or privileges of our Series B Preferred Stock; (2) authorize or issue any senior stock (or securities convertible into senior stock), or amend or alter our articles of incorporation to increase the number of authorized or issued shares of our Series B Preferred Stock; (3) decrease the number of authorized shares of our Series B Preferred Stock (other than as permitted pursuant to a conversion, redemption or repurchase by us thereof); (4) issue any shares of our Series B Preferred Stock (other than pursuant to the amended and restated invested agreement, entered into on March 30, 2021, by and between Bain Capital Private Equity, LP ("BCPE") and us (the "Investment Agreement"); and (5) effect any voluntary deregistration or delisting with the NYSE of our common stock.

Furthermore, we may not, unless holders of Series B Preferred Stock otherwise consent in writing (or if such action is taken with respect to a Permitted Issuance (as defined in the Investment Agreement)), so long as BCPE owns at least 5% of the number of shares of Series B Preferred Stock that it held immediately following the issuance and sale of the Series B-2 Preferred Stock upon completion of our acquisition of Coherent, Inc., (i) authorize or issue any parity stock and (ii) pay any cash dividend on our common stock (other than ordinary dividends). We also may not, unless BCPE otherwise consents in writing (or if such action is taken with respect to a Permitted Issuance (as defined in the Investment Agreement)), so long as it owns at least 25% of the number of shares of Series B Preferred Stock that it held immediately following the issuance and sale of the Series B-2 Preferred Stock upon completion of our acquisition of Coherent, Inc., redeem, repurchase or otherwise acquire (or make or declare any dividend or distribution in respect of) any junior stock (subject to certain exceptions, including, among other things, ordinary dividends, non-cash dividends or other distributions paid pro rata to all holders of our common stock and, if applicable, holders of Series B Preferred Stock, repurchases of junior stock of up to $100 million on an aggregate annual basis and dividends on junior stock in kind or in the form of other junior securities or securities convertible into or exchange for such junior securities). Moreover, under the terms of the Investment Agreement, following the closing of the initial investment and for so long as BCPE beneficially owns shares of Series B Preferred Stock (or shares of our common stock issued upon the conversion thereof) that represent, in the aggregate and on an as-converted basis, at least 25% of the number of shares of Series B Preferred Stock that it held immediately following the completion of the issuance and sale of the Series B-2 Preferred Stock upon completion of our acquisition of Coherent, BCPE will have the right to nominate one designee and to designate one observer to the our Board of Directors. Circumstances may occur in which the interests of BCPE could conflict with the interests of holders of other outstanding capital stock, including our common stock.

Reports published by securities or industry analysts, freelance bloggers and credit rating agencies, including projections in those reports that exceed our actual results, could adversely affect our share price and trading volume.

Research analysts and freelance bloggers publish their own quarterly projections regarding our operating results. These projections may vary widely from one another and may not accurately predict the results we actually achieve. Our share price may decline if we fail to meet securities research analysts' projections. Similarly, if one or more of the analysts who cover us change their recommendations regarding our common stock or publish inaccurate or unfavorable research about our business, our share price could decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, our share price or trading volume could decline.

We depend on our subsidiaries for cash to fund our operations and expenses, including future dividend payments with respect to our outstanding preferred stock.

A significant portion of our operations is conducted through our subsidiaries, and our ability to generate cash to meet our debt service obligations or to make future dividend payments, to the extent we elect to make such payments in cash, with respect to our Series B Preferred Stock is highly dependent on the earnings and the receipt of funds from our subsidiaries. Our subsidiaries are separate legal entities that have no obligation to make any funds available to us, whether by dividends, loans, or other payments.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 1C. CYBERSECURITY

Coherent's Board of Directors (the "Board") recognizes the critical importance of maintaining the trust and confidence of our customers, suppliers, business partners, employees, shareholders and other stakeholders. One of the critical factors in maintaining this trust is by the Board being involved in oversight of the Company's enterprise risk management ("ERM") program, of which cybersecurity represents a critical component. Coherent's cybersecurity policies, standards, processes and practices are fully integrated into the Company's ERM program and are based on recognized frameworks established by the National Institute of Standards and Technology, and the International Standards Organization Risk Management Guidelines (ISO 31000), as well as other applicable industry standards.

Governance: Coherent's cybersecurity program is overseen by the Board's Environment, Sustainability and Governance ("ESG") committee. The ESG Committee is briefed quarterly by management on, among other things, updates to cybersecurity and related programs, and notable cyber incidents, threats and vulnerabilities, and provides direction on cybersecurity risk management. In addition, Coherent has established a Crisis Management Team (CMT) with responsibility for, among other things, oversight and management of cybersecurity events, including significant and material cybersecurity events. The CMT reports, as appropriate, to the ESG Committee. The CMT is headed by Coherent's Chief Risk Officer (CRO). Additionally, Coherent has a dedicated internal cybersecurity team (Cybersecurity Team), managed by the Global Head of Cybersecurity.

Collaborative Approach: The Company has implemented a comprehensive, cross-functional approach to identifying, preventing and mitigating cybersecurity threats and incidents, while also implementing controls and procedures that provide for the prompt escalation of certain cybersecurity incidents so that decisions regarding the public disclosure and reporting of such incidents can be made by management in a timely manner. On a regular meeting cadence, Coherent's President convenes a senior cybersecurity committee for reporting and planning. The committee consists of the Chief Information Officer (CIO), the Global Head of Cybersecurity, the Vice President of IT Operations, the Senior Director of IT Security, the General Counsel for Technology and Risk Management, and the CRO. Members of partner technology-risk advisory firms and Coherent internal experts from other disciplines participate in committee activities as needed from time to time.

As to experience of the various members of Coherent's cybersecurity functional team, the CIO is a technology executive with over 25 years of experience at public companies, specializing in IT leadership, cybersecurity, and strategic technology initiatives, including leading risk management, data governance, compliance, and SOX audits, aligning technology with business goals and robust data protection. He holds a B.S. in Electrical Engineering and ITIL certification. The Coherent Global Privacy Officer earned a B.A. and a Juris Doctor degree and has over 20 years of experience in legal practice, focusing specifically on privacy law for the past eight years. Additionally, the Coherent Global Privacy Officer is an active member of the International Association of Privacy Professionals (IAPP) and holds both the Certified Information Privacy Professional/ Europe (CIPP/E) and Certified Information Privacy Manager (CIPM) certifications from the IAPP. The General Counsel for Technology and Risk Management holds a B.S. in Industrial Engineering, and a Juris Doctor degree and has over 38 years of experience in legal practice, 25 years of which specifically representing businesses and financial institutions in data security and privacy in both private practice and as at in-house attorney at various private and public companies. The Senior Manager, Security, Risk & Compliance, has been in Information Technology for 25 years and in IT security for 16 years, and holds a B.S. in Computer Science, with a minor in Mathematics, and an ISC2 CISSP Certification. He is a member of the ACM and a Senior Member of the IEEE. The Senior Director of Information Security is a CISSP and member of ISSA, practicing security for over 30 years, with a B.S. degree. He also has served as a consultant and has managed international cybersecurity teams with Fortune 100 companies in finance, banking, technology, biotech, security consulting, and large manufacturing in broad areas of cybersecurity. The VP of IT Infrastructure Operations and Interim Head of Information Security and Compliance has 25 years of experience at public companies, specializing in IT leadership, cybersecurity, and strategic technology initiatives, and holds a M.S. in Electrical Engineering.

Incident Response and Recovery Planning: Coherent has instituted a robust Cybersecurity Incident Response Plan (the CIRP), which provides a framework for responding to cybersecurity incidents at escalating severity levels. The CIRP sets out a coordinated approach to discovering, investigating, containing, tracking, mitigating, and remediating cybersecurity incidents, including a framework for elevating and reporting findings and keeping senior management and other key stakeholders informed and involved, based on assessments regarding the scope or significance of incidents. The CIRP is implemented by the Coherent Cyber Incident Response Team (CIRT), which is headed by the Global Head of Cybersecurity, and includes as members the head of the CMT, the Chief Legal Officer, the Cybersecurity Team, and select members of the ERM team.

Technical Safeguards: The Company deploys technical safeguards that are designed to protect the Company's information systems from cybersecurity threats, including firewalls, intrusion prevention and detection systems, anti-malware functionality and access controls, which are evaluated and improved through vulnerability assessments and cybersecurity threat intelligence.

Security Policy and Requirements: The Coherent Cybersecurity Team has robust processes and redundancies in place designed with the objective of deterring, detecting, mitigating, and responding to potential cybersecurity threats, which includes a vulnerability assessment and prioritization, and as necessary, remediation plans. The Cybersecurity Team also performs periodic system penetration testing to validate the Company's security controls and assess Coherent's infrastructure and applications. All employees take mandatory periodic security awareness training on the Company's data security policies and procedures, which is supplemented by Company-wide testing initiatives, including periodic phishing tests. Additionally, the IT group and the Cybersecurity Team participate in annual tabletop exercises designed to simulate a response to a cybersecurity incident. The Cybersecurity Team incorporates the findings from these exercises into the Coherent processes. Further, in 2023, select members of the senior management team and the Cybersecurity Team participated in a tabletop exercise.

Third-Party Risk Management: The Company maintains a risk-based approach to identifying and overseeing cybersecurity risks presented by third parties. This includes external third parties that may have permission to access Coherent IT systems and assets, such as consultants, and review of the systems of third parties that could adversely impact Coherent's infrastructure in the event of a cybersecurity incident affecting those third-party systems, such as through vendors and other service providers.

The Company also regularly engages third parties to perform assessments on our cybersecurity measures, including information security maturity assessments, audits and independent reviews of our information security control environment and operating effectiveness. The results of such assessments, audits and reviews are reported to the Risk Management Committee and the Board, and the Company adjusts its cybersecurity policies, standards, processes and practices as necessary based on the information provided by these assessments, audits and reviews.

Education and Awareness: The Company provides regular, mandatory training for personnel regarding cybersecurity threats as a means to equip the Company's personnel with effective tools to address cybersecurity threats, and to communicate the Company's evolving information security policies, standards, processes and practices.

Cybersecurity risks and threats, including as a result of any previous cybersecurity incidents, have not materially impacted and are not reasonably expected to materially impact Coherent or Coherent's operations to date. However, the Company recognizes the ever-evolving cyber risk landscape and cannot provide any assurances that it will not be subject to a material cybersecurity incident in the future.

Item 2. PROPERTIES

Information regarding our principal U.S. properties at June 30, 2024, is set forth below:

Location	Primary Use(s)	Primary Business Segment(s)	Approximate Square Footage	Ownership
Sherman, TX	Manufacturing	Materials	700,000	Owned
Easton, PA	Manufacturing and Research and Development	Materials	281,000	Leased
Saxonburg, PA	Manufacturing and Research and Development	Materials	235,000	Owned and Leased
Santa Clara, CA	Manufacturing and Research and Development	Lasers	200,000	Owned
Warren, NJ	Manufacturing and Research and Development	Materials	159,000	Leased
Newark, DE	Manufacturing and Research and Development	Materials	135,000	Leased
Fremont, CA	Manufacturing and Research and Development	Materials	122,000	Leased
Murrieta, CA	Manufacturing and Research and Development	Materials	108,000	Leased

Information regarding our principal foreign properties at June 30, 2024, is set forth below:

Location	Primary Use(s)	Primary Business Segment(s)	Approximate Square Footage	Ownership
China	Manufacturing, Research and Development, and Distribution	Materials and Networking	2,993,000	Owned and Leased
Germany	Manufacturing, Research and Development	Lasers	911,000	Owned and Leased
Malaysia	Manufacturing, Research and Development	Networking	863,000	Owned
Vietnam	Manufacturing	Materials and Networking	719,000	Owned and Leased
Philippines	Manufacturing	Materials	426,000	Leased
United Kingdom	Manufacturing, Research and Development	Materials and Networking	319,000	Owned and Leased
Germany	Manufacturing and Distribution	Materials and Networking	138,000	Owned and Leased
Switzerland	Manufacturing, Research and Development, and Distribution	Materials	112,000	Leased

The square footage listed for each of the above properties represents facility square footage, except in the case of the Philippines location, which includes land.

Item 3. LEGAL PROCEEDINGS

The Company and its subsidiaries are involved in various claims and lawsuits incidental to its business. The resolution of each of these matters is subject to various uncertainties, and it is possible that these matters may be resolved unfavorably to the Company. Management believes, after consulting with legal counsel, that the ultimate liabilities, if any, resulting from such legal proceedings will not materially affect the Company's financial condition, 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 New York Stock Exchange (the "NYSE") under the symbol "COHR", beginning February 23, 2023, when the Company voluntarily transferred the listing of its common stock from the NASDAQ Global Select Market to the NYSE. As of August 13, 2024, there were approximately 906 holders of record of our common stock. The Company historically has not paid cash dividends on its common stock and does not presently anticipate paying cash dividends on its common stock in the future.

Dividends on the Company's Series A Mandatory Convertible Preferred Stock were payable on a cumulative basis when, as and if declared by our Board of Directors, or an authorized committee of our Board of Directors, at an annual rate of 6% of the liquidation preference of $200.00 per share. All outstanding shares of Series A Mandatory Convertible Preferred Stock were converted to Company Common Stock on July 3, 2023, and no shares of Series A Mandatory Convertible Preferred Stock are currently issued and outstanding.

Dividends on the Company's Series B Convertible Preferred Stock will be payable on a cumulative basis when, as and if declared by our Board of Directors, or an authorized committee of our Board of Directors, at an annual rate of 5%, subject to increase if Coherent defaults on payment obligation with respect to these shares, not to exceed 14% per annum. Until the fourth anniversary of the issuance of the Series B Convertible Preferred Stock, dividends are payable solely in-kind. After the fourth anniversary, dividends are payable, at the Company's option, in cash, in-kind or as a combination of both.

ISSUER PURCHASES OF EQUITY SECURITIES

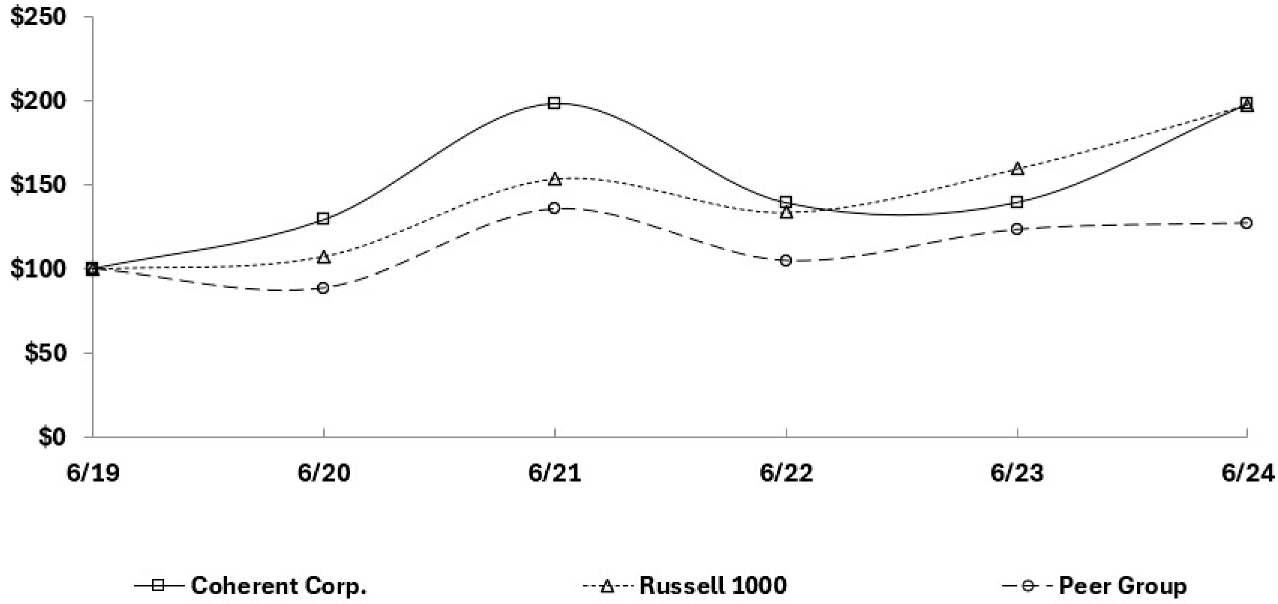
In August 2014, the Company's Board of Directors authorized the Company to purchase up to $50 million of its common stock through a share repurchase program (the "Program") that calls for shares to be purchased in the open market or in private transactions from time to time. The Program had no expiration and could be suspended or discontinued at any time. Shares purchased by the Company are retained as treasury stock and available for general corporate purposes. The Company did not repurchase shares pursuant to this Program during the fiscal years ended June 30, 2024, or June 30, 2023. As of June 30, 2024, the Company has cumulatively purchased 1,416,587 shares of its common stock pursuant to the Program for approximately $22 million. On February 21, 2024, the Company's Board of Directors terminated the Program and any remaining amount authorized for the repurchase of shares.

PERFORMANCE GRAPH

The following graph compares cumulative total shareholder return on the Company's common stock with the cumulative total shareholder return of the Russell 1000 Index and with a peer group of companies constructed by the Company for the period from June 30, 2019, through June 30, 2024. The Company's current fiscal year peer group includes IPG Photonics Corp., Wolfspeed Inc., Lumentum Holdings, Inc., Corning, Inc., MKS Instruments, Inc., and Honeywell International, Inc.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Coherent Corp., the Russell 1000 Index, and a Peer Group



*$100 invested on 6/30/19 in stock or index, including reinvestment of dividends.
Fiscal year ending June 30.

Item 6. [RESERVED]

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is designed to provide a reader of Coherent's financial statements with a narrative from the perspective of management. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and related notes included under Item 8 of this annual report. Coherent's MD&A is presented in the following sections:

- Forward-Looking Statements
- Overview
- Restructuring and Site Consolidation
- Silicon Carbide Investment
- Critical Accounting Policies and Estimates
- Conversion of Series A Preferred Stock
- Fiscal Year 2024 Compared to Fiscal Year 2023
- Fiscal Year 2023 Compared to Fiscal Year 2022
- Liquidity and Capital Resources
- Off Balance Sheet Arrangements

Forward-looking statements in Item 7 may involve risks and uncertainties that could cause results to differ materially from those projected (refer to Item 1A for discussion of these risks and uncertainties).

Forward-Looking Statements

Certain statements contained in this MD&A are forward-looking statements as defined by Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding projected growth rates, markets, product development, financial position, capital expenditures and foreign currency exposure. Forward-looking statements are also identified by words such as "expects," "anticipates," "believes," "intends," "plans," "projects" or similar expressions.

Although our management considers these expectations and assumptions to have a reasonable basis, there can be no assurance that management's expectations, beliefs or projections as expressed in the forward-looking statements will actually occur or prove to be correct. In addition to general industry and global economic conditions, factors that could cause actual results to differ materially from those discussed in the forward-looking statements in this Annual Report on Form 10-K include, but are not limited to: (i) the failure of any one or more of the assumptions stated above to prove to be correct; and (ii) the risks relating to forward-looking statements and other "Risk Factors" discussed herein at Item 1A. The Company disclaims any obligation to update information contained in these forward-looking statements whether as a result of new information, future events or developments, or otherwise.

In addition, we operate in a highly competitive and rapidly changing environment; new risk factors can arise, and it is not possible for management to anticipate all such risk factors, or to assess the impact of all such risk factors on our business or the extent to which any individual risk factor, or combination of risk factors, may cause results to differ materially from those contained in any forward-looking statement. The forward-looking statements included in this Annual Report on Form 10-K are based only on information currently available to us and speak only as of the date of this Report. We do not assume any obligation, and do not intend to, update any forward-looking statements, whether as a result of new information, future developments or otherwise, except as may be required by the securities laws. Investors should, however, consult any further disclosures of a forward-looking nature that the Company may make in its subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, or other disclosures filed with or furnished to the SEC.

Investors should also be aware that, while the Company does communicate with securities analysts from time to time, such communications are conducted in accordance with applicable securities laws. Investors should not assume that the Company agrees with any statement, conclusion of any analysis, or report issued by any analyst irrespective of the content of the statement or report.

Overview

Coherent Corp. ("Coherent", the "Company," "we," "us" or "our"), a global leader in materials, networking, and lasers, is a vertically integrated manufacturing company that develops, manufactures, and markets engineered materials, optoelectronic components and devices, and lasers for use in the industrial, communications, electronics and instrumentation markets. Headquartered in Saxonburg, Pennsylvania, Coherent has research and development, manufacturing, sales, service, and distribution facilities worldwide. Coherent produces a wide variety of lasers, along with application-specific photonic and electronic materials and components, and deploys them in various forms, including integrated with advanced software to enable its customers.

We generate almost all of our revenues, earnings and cash flows from developing, manufacturing and marketing a broad portfolio of products and services for our end markets. We also generate revenue, earnings and cash flows from externally-funded research and development contracts relating to the development and manufacture of new technologies, materials and products.

Our customer base includes original equipment manufacturers; laser end users; system integrators of high-power lasers; manufacturers of equipment and devices for our end markets.

As we grow, we are focused on scaling our Company and deriving the continued benefits of vertical integration as we strive to be a best-in-class player in all of our highly competitive markets. We may elect to change the way in which we operate or are organized in the future to enable the most efficient implementation of our strategy.

Restructuring and Site Consolidation

Restructuring Plan

On May 23, 2023, the Board of Directors approved the Company's May 2023 Restructuring Plan which includes site consolidations, facilities moves and closures, as well as the relocation and requalification of certain manufacturing facilities. These restructuring actions are expected to be accompanied by other cost reductions and are intended to realign our cost structure as part of a transformation to a simpler, more streamlined, resilient and sustainable business model.

In fiscal 2024, these activities resulted in charges of $27 million, primarily for accelerated depreciation, the write-off of property and equipment, and site move costs. In fiscal 2023, these activities resulted in $119 million of charges primarily for employee termination costs, and the write-off of property and equipment, net of $65 million from reimbursement arrangements. We expect the restructuring actions to be substantially completed by the end of fiscal 2025. However, the actual timing and costs associated with these restructuring actions may differ from our current expectations and estimates and such differences may be material. See Note 22. Restructuring Plan to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.

Synergy and Site Consolidation Plan

On May 20, 2023, the Company announced that it had accelerated some of the actions planned as part of its multi-year synergy and site consolidation efforts following the acquisition of Coherent, Inc., including site consolidations and relocations to lower cost sites. These relocations and other actions are expected to result in the Company achieving its previously announced $250 million synergy plan, which includes savings from supply chain management, internal supply of enabling materials and components, operational efficiencies in all functions due to scale, global functional model efficiencies and consolidation of corporate costs. In fiscal 2024, the acceleration of these activities resulted in $40 million of charges primarily for overlapping labor related to transition of manufacturing operations to other sites, shut down costs for sites being exited, accelerated depreciation and employee termination costs. In fiscal 2023, the acceleration of these activities resulted in $20 million in charges primarily for employee termination costs, the write-off of inventory for products that have been exited and shut down costs.

Silicon Carbide Investment

On May 10, 2023, the Company announced that it had commenced a review of strategic alternatives for its Silicon Carbide business. On December 4, 2023, Silicon Carbide LLC ("Silicon Carbide"), one of the Company's subsidiaries, completed the sale of Class A Common Units to Denso Corporation ("Denso") and Mitsubishi Electric Corporation ("MELCO"), under which they collectively invested an aggregate of $1 billion in Silicon Carbide LLC (collectively, the "Equity Investments"). As a consequence of the Equity Investments, the Company's ownership interest in the Class A Common Units of Silicon Carbide LLC was reduced to approximately 75%. Denso and MELCO each, individually, own approximately 12.5% of the Class A Common Units of Silicon Carbide LLC. The Equity Investments in Silicon Carbide enables Coherent to increase its available free cash flow to provide greater financial and operational flexibility to execute its capital allocation priorities, as the aggregate $1 billion investment will be used to fund future capital expansion of Silicon Carbide. See Note 12. Noncontrolling Interests included in Item 8 of this Annual Report on Form 10-K for further information on the noncontrolling interests in our Silicon Carbide subsidiary.

Critical Accounting Policies and Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States requires the Company's management to make judgments, assumptions and estimates that affect the amounts reported in its Consolidated Financial Statements and accompanying notes. Note 1. Nature of Business and Summary of Significant Accounting Policies, of the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K, describes the significant accounting policies and accounting methods used in the preparation of the Company's Consolidated Financial Statements. Management bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates.

Management has discussed the development and selection of the critical accounting policies and estimates described below with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the related disclosure. In addition, there are other items within our Consolidated Financial Statements that require estimation but are not deemed critical. Changes in estimates used in these and other items could impact the Consolidated Financial Statements.

Goodwill

We test goodwill for impairment annually, and when events or changes in circumstances indicate that goodwill might be impaired. The determination of whether goodwill is impaired requires us to make judgments based on long-term projections of future performance. Estimates of fair value are based on our projection of revenues, operating costs and cash flows of each reporting unit, considering historical and anticipated results and general economic and market conditions and their projections. For fiscal year 2024, we performed a quantitative assessment. The fair values of the reporting units were determined using a discounted cash flow analysis with projected financial information based on our most recently completed long-term strategic planning processes and also considers the current financial performance compared to our prior projections of the reporting units, as well as a market analysis. Determination of the fair value requires discretion and the use of estimates by management. If actual results are not consistent with management's estimates and assumptions, a material goodwill impairment charge could occur, which could have a material adverse effect on our consolidated financial statements.

Due to the cyclical nature of our business, and the other factors described in the section on Risk Factors set forth in Item 1A of this Annual Report on Form 10-K, the profitability of our individual reporting units may periodically be affected by downturns in customer demand, operational challenges and other factors. If material adverse conditions occur that impact one or more of our reporting units, our determination of future fair value might not support the carrying amount of one or more of our reporting units, and the related goodwill would need to be impaired. We will continue to monitor any changes to our assumptions and will evaluate goodwill as deemed warranted during future periods.

Income Taxes

The Company prepares and files tax returns based on its interpretation of tax laws and regulations and records estimates based on these judgments and interpretations. In the normal course of business, the Company's tax returns are subject to examination by various taxing authorities, which may result in future tax, interest and penalty assessments by these authorities. The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. The amount of unrecognized tax benefits is adjusted for changes in facts and circumstances. For example, adjustments could result from significant amendments to existing tax law and the issuance of regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. The Company believes that its estimates for uncertain tax positions are appropriate and sufficient to pay assessments that may result from examinations of its tax returns. The Company recognizes both accrued interest and penalties related to unrecognized tax benefits in income tax expense.

Management evaluates the realizability of deferred tax assets for each jurisdiction in which it operates. If the Company experiences cumulative pretax income in a particular jurisdiction in a three-year period including the current and prior two years, management normally concludes that the income tax assets will more likely than not be realizable and no valuation allowance is recognized, unless known or planned operating developments, or changes in tax laws, would lead management to conclude otherwise. However, if the Company experiences cumulative pretax losses in a particular jurisdiction in a three-year period, management then considers a series of factors in the determination of whether the deferred tax assets can be realized. The Company has recorded valuation allowances against certain of its deferred tax assets, primarily those that have been generated from net operating losses in certain foreign taxing jurisdictions and acquired U.S. carryforwards. In evaluating whether the Company would more likely than not recover these deferred tax assets, it has not assumed any future taxable income or tax planning strategies in the jurisdictions associated with these carryforwards where history does not support such an assumption. Implementation of tax planning strategies to recover these deferred tax assets or future income generation in these jurisdictions could lead to the reversal of these valuation allowances and a reduction of income tax expense.

The Organization for Economic Co-operation and Development ("OECD"), a global policy forum, introduced a framework to implement a global minimum tax of 15% which would apply to multinational corporations, referred to as Pillar Two. Nearly all OECD member jurisdictions have agreed in principle to adopt these provisions and numerous jurisdictions have enacted legislation, including jurisdictions where the Company operates, with a subset of the rules becoming effective for our fiscal year beginning on July 1, 2024, and the remaining rules becoming effective for our fiscal year beginning on July 1, 2025, or in later periods. The Company is continuing to analyze the Pillar Two rules as countries implement additional legislation. Implementation of the OECD proposal may have a material Impact on the Company's Consolidated Financial Statements in the future.

Conversion of Series A Preferred Stock

All outstanding shares of Mandatory Convertible Preferred Stock were converted to Company Common Stock on July 3, 2023, and no shares of Mandatory Convertible Preferred Stock are currently issued and outstanding.

Fiscal Year 2024 Compared to Fiscal Year 2023

The Company reports its financial results in the following three designated segments: (i) Networking, (ii) Materials, and (iii) Lasers.

The following table sets forth select items from our Consolidated Statements of Earnings (Loss) for the years ended June 30, 2024 and 2023 ($ in millions except per share information) [1]:

	Year Ended June 30, 2024		Year Ended June 30, 2023	
		% of Revenues		% of Revenues
Total revenues	$ 4,708	100 %	$ 5,160	100 %
Cost of goods sold	3,252	69	3,542	69
Gross margin	1,456	31	1,618	31
Operating expenses:				
Internal research and development	479	10	500	10
Selling, general and administrative	854	18	1,037	20
Restructuring charges	27	1	119	2
Interest and other, net	244	5	318	6
Loss before income taxes	(148)	(3)	(356)	(7)
Income Tax Benefit	11	—	(96)	(2)
Net loss	(159)	(3)	(259)	(5)
Net loss attributable to noncontrolling interests	(3)	— %	—	— %
Net loss attributable to Coherent Corp.	$ (156)	(3)%	$ (259)	(5)%
Diluted loss per share	$ (1.84)		$ (2.93)	

[1] Some amounts may not add due to rounding.

Consolidated

Revenues. Revenues for the year ended June 30, 2024 decreased 9% to $4,708 million, compared to $5,160 million for the prior fiscal year.

Revenues decreased in all four markets, with the largest decline, $270 million, or 43%, in the electronics market, primarily from lower volumes in the consumer electronics vertical, largely due to a design change implemented by a significant electronics customer. Revenues decreased by $82 million, or 17% in the instrumentation market due to decreased volumes in the life sciences vertical from continued inventory digestion by our customers and in the industrial market by $81 million, or 5%, as a result of decreased shipments in the precision manufacturing vertical primarily due to macroeconomic conditions. In addition, revenues decreased $20 million, or 1%, in the communications market, primarily due to decreased volumes in the telecom vertical as our communications service provider customers continued to work down their inventory levels with reduced capital spending, partially offset by increased shipments in the datacom vertical driven by increased AI-related datacom shipments.

From a segment perspective, Materials decreased $333 million year-over-year, primarily due to lower demand for sensing products and other consumer applications in the consumer electronics vertical within the electronics market for the reasons discussed above. Networking revenues decreased $45 million year-over-year, with decreases from the telecom vertical partially offset by increases in the datacom vertical, both in our communications market, for the reasons discussed above. Lasers revenue decreased $74 million year-over-year due to lower demand in the life sciences vertical in the instrumentation market and to lower demand in the precision manufacturing and semiconductor and display capital equipment verticals in the industrial end market.

Gross margin. Gross margin for the year ended June 30, 2024 was $1,456 million, or 30.9%, of total revenues, compared to $1,618 million, or 31.4% of total revenues, for fiscal 2023, a slight decrease of 43 basis points. During fiscal 2023, the Company recorded $158 million in cost of goods sold related to the fair value adjustment on acquired inventory from the acquisition of Coherent, Inc. ("Merger"). Gross margin, excluding the fair value adjustment on acquired inventory, decreased 349 basis points for fiscal 2024 compared to fiscal 2023 primarily due to lower revenues, less favorable sales mix especially in the datacom vertical in the communications market, underutilized operating capacity in several plants, shut down costs related to site consolidations, lower yields in the datacom vertical, higher costs related to product lines that are being exited, higher inventory provisions and the unfavorable foreign exchange rates.

Internal research and development. Internal research and development ("IR&D") expenses for the fiscal year ended June 30, 2024 were $479 million, or 10% of revenues, compared to $500 million, or 10% of revenues, last fiscal year. The decrease of $21 million for fiscal 2024 is due to all three segments and was driven by lower costs due to the consolidation of sites and our efforts to control costs. The IR&D expenses are primarily related to our continued investment in new products and platform technologies in an effort to accelerate our organic growth across all of our businesses, including significant investments in datacom transceivers for AI, indium phosphide and gallium arsenide semiconductor lasers, silicon carbide materials, and lasers for display processing, semiconductor capital equipment, and instrumentation.

Selling, general and administrative. Selling, general and administrative ("SG&A") expenses for the year ended June 30, 2024 were $854 million, or 18% of revenues, compared to $1,037 million, or 20% of revenues, last fiscal year. The decrease in SG&A as a percentage of revenue for fiscal 2024 compared to fiscal 2023 was primarily the result of lower amortization expense of $117 million resulting from (1) the Merger, as backlog intangibles were fully amortized in fiscal 2023, (2) lower amortization for tradenames impaired in the fourth quarter of fiscal 2023, and (3) $31 million charges for impairment of certain tradename and customer list intangibles assets in fiscal 2023. In addition, SG&A decreased due to lower charges related to the Merger, including $39 million lower transaction fees and financing, and lower one-time expense of $18 million related to share-based compensation resulting from the Merger, as well as lower costs due to the consolidation of sites and our efforts to control costs, partially offset by the impact of lower revenues.

Restructuring Charges. Restructuring charges related to our Restructuring Plan for the year ended June 30, 2024 were $27 million, or 1% of revenues, and consist primarily of accelerated depreciation, equipment write-offs and move costs due to the consolidation of certain manufacturing sites. Restructuring charges related to our Restructuring Plan for the year ended June 30, 2023 were $119 million, or 2% of revenues, and consisted of severance and equipment write-offs, net of reimbursements, due to the consolidation of certain manufacturing sites. See Note 22. Restructuring Plan to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.

Interest and other, net. Interest and other, net for the year ended June 30, 2024 was expense of $244 million compared to expense of $318 million last fiscal year, a decrease of $75 million. Included in Interest and other, net, were interest expense on borrowings, Merger financing fees (fiscal 2023), foreign currency gains and losses, amortization of debt issuance costs, equity gains and losses from unconsolidated investments, and interest income on excess cash balances. The decrease of $75 million in comparison to fiscal 2023 was driven by driven by $39 million incremental interest and dividend income due to increases in interest and dividend rates earned on investments, as well as the increase in restricted cash balances and $35 million incurred in the prior year related to financing of the Merger. In addition, interest expense increased $2 million due to higher interest rates on our Term facilities, net of higher benefit from our interest rate cap and swap.

Income taxes. Our effective income tax rate for fiscal 2024 was (8)%, compared to an effective tax rate of 27% last fiscal year. The difference between our effective tax rate and the U.S. statutory rate of 21% was due to the establishment of a valuation allowance related to certain US deferred tax assets.

Net loss attributable to noncontrolling interests. Net loss attributable to noncontrolling interests for the year ended June 30, 2024 was $3 million, and represents the noncontrolling interest holders' shares of losses of Silicon Carbide LLC after the close of the transaction on December 4, 2023. See Note 12. Noncontrolling Interests to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.

Segment Reporting

Revenues and operating income for our reportable segments are discussed below. Operating income differs from net earnings in that operating income excludes certain operational expenses, including interest, the impact of foreign exchange, and other miscellaneous expenses as reported in Other expense (income) - net. Management believes operating income to be a useful measure for investors, as it reflects the results of segment performance over which management has direct control and is used by management in its evaluation of segment performance. See Note 15. Segment and Geographic Reporting to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information on the Company's reportable segments and for the reconciliation of operating income to net earnings, which is incorporated herein by reference.

Networking ($ in millions)

	Year Ended June 30, 2024	Year Ended June 30, 2023	% Decrease
Revenues	$ 2,296	$ 2,341	(2)%
Operating income	$ 179	$ 222	(20)%

Revenues for the year ended June 30, 2024 for Networking decreased 2% to $2,296 million, compared to $2,341 million for last fiscal year. The decrease in revenues of $45 million during fiscal 2024 was primarily due to decreased volumes year-over-year in the telecom vertical as our communications service provider customers continue to work down their inventory levels with reduced capital spending, partially offset by increases in the datacom vertical driven by increased AI-related datacom transceivers shipments, both within the communications market.

Operating income for the year ended June 30, 2024 for Networking decreased 20% to $179 million, compared to operating income of $222 million last fiscal year. The decrease in operating income for fiscal 2024 was driven by $45 million lower revenues and lower margin percentage partially offset by lower restructuring charges. The margin percentage was lower than fiscal 2023 due to less favorable sales mix in the datacom vertical, the impact of fixed manufacturing costs as a percentage of revenues on lower revenues in the telecom vertical, lower yields in the datacom vertical and higher inventory provisions related to products that are being exited. The restructuring charges decreased $60 million due to lower charges for employee terminations related to our Restructuring Plan.

Materials ($ in millions)

	Year Ended June 30, 2024	Year Ended June 30, 2023	% Decrease
Revenues	$ 1,017	$ 1,350	(25)%
Operating income	$ 63	$ 160	(61)%

Revenues for the fiscal year ended June 30, 2024 for Materials decreased 25% to $1,017 million, compared to revenues of $1,350 million last fiscal year. The decrease in revenues during the current fiscal year was primarily related to a decrease of $265 million in the electronics market mostly due to lower volumes in our consumer electronics vertical largely due to a design change implemented by a significant electronics customer, partially offset by higher shipments in our automotive vertical driven by electric vehicles, as well as decreases in shipments to a lesser extent derived from macroeconomic conditions in our precision manufacturing and semiconductor capital equipment verticals in the industrial market.

Operating income for the fiscal year ended June 30, 2024 for Materials decreased 61%, with operating income of $63 million in the current year, compared to operating income of $160 million last fiscal year. The decrease in operating income during the current fiscal year was driven by $333 million lower revenues and higher costs for sites being shutdown, partially offset by $33 million lower restructuring charges, primarily severance, related to our Restructuring Plan and $33 million charges in fiscal 2023 for impairment of certain tradename, customer list and technology intangibles.

Lasers ($ in millions)

	Year Ended June 30, 2024	Year Ended June 30, 2023	% Decrease
Revenues	$ 1,395	$ 1,469	(5)%
Operating income	$ (146)	$ (419)	(65)%

Revenues for the fiscal year ended June 30, 2024 for Lasers decreased 5% to $1,395 million, compared to revenues of $1,469 million last fiscal year. The decrease was primarily due to $56 million lower shipments to the instrumentation market, primarily in the life sciences vertical where we see continued inventory digestion by our customers, and an $18 million drop in the industrial market as a result of lower volumes in our precision manufacturing and display capital equipment verticals due to macroeconomic conditions, partially offset by higher volumes in our semiconductor capital equipment display vertical.

Operating loss for the fiscal year ended June 30, 2024 for Lasers decreased 65%, with operating loss of $146 million in the current year, compared to operating loss of $419 million last fiscal year. The lower operating loss was driven by $312 million lower costs in the current year compared to the prior year related to the Merger, including $158 million lower amortization of the fair value step-up on acquired inventory, $83 million lower amortization expense related to the fair value of intangible assets acquired, $39 million lower transaction fees and financing, $18 million lower nonrecurring share-based compensation and $14 million lower integration costs. Excluding the lower Merger related costs, operating income for fiscal 2024 decreased $39 million primarily due to lower revenues and lower gross margin percentage, due to less favorable mix within the industrial and instrumentation markets, the unfavorable impact of fixed manufacturing costs with lower revenues and higher inventory provisions.

Fiscal Year 2023 Compared to Fiscal Year 2022

The following table sets forth select items from our Consolidated Statements of Earnings (Loss) for the years ended June 30, 2023 and 2022 ($ in millions except per share information) [(1)]:

	Year Ended June 30, 2023		Year Ended June 30, 2022	
		% of Revenues		% of Revenues
Total revenues	$ 5,160	100 %	$ 3,317	100 %
Cost of goods sold	3,542	69	2,051	62
Gross margin	1,618	31	1,265	38
Operating expenses:				
Internal research and development	500	10	377	11
Selling, general and administrative	1,037	20	474	14
Restructuring charges	119	2	—	—
Interest and other, net	318	6	132	4
Earnings (loss) before income tax	(356)	(7)	282	8
Income tax (expense) benefit	(96)	(2)	47	1
Net earnings (loss)	$ (259)	(5)%	$ 235	7 %
Diluted earnings (loss) per share	$ (2.93)		$ 1.45	

(1) Some amounts may not add due to rounding.

Consolidated

Revenues. Revenues for the year ended June 30, 2023 increased 56% to $5,160 million, compared to $3,317 million for fiscal 2022. The biggest driver of increased revenue relates to the Lasers segment, which was acquired as part of the Merger. The largest growth was in the industrial market with increased sales of $1,015 million, or 136%, year-over-year primarily due to the Lasers segment. The remaining contributions to the increased revenues were from volume growth in the electronics market, which grew 102% year-over-year, contributing an incremental $315 million in sales, and strength in the communications market, which grew by 6% year-over-year, contributing an incremental $139 million in sales. The growth in the industrial end market was primarily due to incremental sales of $1,088 million in the Lasers segment, partially offset by $73 million of softer sales in the Materials and Networking segments. The growth in the electronics market was primarily in the Materials segment due to innovations in sensing products. The strength in the communications market, primarily in the Networking segment, was due to stronger demand volumes in telecom and datacom. Lasers revenue for fiscal 2023 was $1,469 million, of which 74% was in the industrial end market and 26% in the instrumentation end market.

Organic revenue growth was $374 million, or 11%, year-over-year. Materials contributed $230 million of this organic growth year-over-year, with $316 million growth in the electronics end market from innovations in sensing products, partially offset by softer sales from the industrial end market. Networking increased $144 million year-over-year, with volume growth in both telecom and datacom.

Gross margin. Gross margin for the year ended June 30, 2023 was $1,618 million, or 31%, of total revenues, compared to $1,265 million, or 38% of total revenues, for fiscal 2022. Gross margin as a percentage of revenues decreased 680 basis points compared to fiscal 2022. The decrease as a percent of revenue for fiscal 2023 was driven by $158 million of additional expense related to the preliminary fair value adjustment on acquired inventory from the Merger and $87 million of incremental amortization expense related to technology acquired as a result of the Merger. Gross margins excluding the fair value adjustment on acquired inventory and incremental amortization decreased 206 basis points for fiscal 2023 compared to the fiscal 2022, which included a less favorable mix of revenues, higher costs related to the write-off of inventory for product lines that are being exited, underutilized operating capacity in several plants, shut down costs related to site consolidations, and the unfavorable impact of foreign exchange rates.

Internal research and development. IR&D expenses for the fiscal year ended June 30, 2023 were $500 million, or 10% of revenues, compared to $377 million, or 11% of revenues, in fiscal 2022. The increase of $122 million for fiscal 2023 was driven by an additional $132 million of IR&D expenses from the Lasers segment. As a percentage of revenues, IR&D spend in the Materials segment decreased 4% year-over-year, due to higher costs in fiscal 2022 related to the launch of new products. The IR&D expenses are primarily related to our continued investment in new products and manufacturing processes across all of our businesses, including significant investments in indium phosphide semiconductor lasers, silicon carbide materials, devices for both power electronics and wireless devices, and lasers for display processing and semiconductor capital equipment.

Selling, general and administrative. Selling, general and administrative ("SG&A") expenses for the year ended June 30, 2023 were $1,037 million, or 20% of revenues, compared to $474 million, or 14% of revenues, in fiscal year 2022. The increase in SG&A as a percentage of revenue for fiscal 2023 compared to fiscal 2022 was primarily the result of incremental amortization expense of $240 million, including $209 million related to the Merger and $31 million charges for impairment of certain tradename and customer list intangibles assets (see Note 7. Goodwill and Other Intangible Assets to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information). In addition, the increase in SG&A as a percentage of revenue was due to higher one time-charges related to the Merger of $125 million for integration, share-based compensation, and transaction fees, as well as the comparatively larger sales and administrative efforts required to sell an entire laser system versus components and subsystems.

Restructuring Charges. Restructuring charges related to our Restructuring Plan for the year ended June 30, 2023 were $119 million, or 2% of revenues, and consist of severance and equipment write-offs, net of reimbursements, due to the consolidation of certain manufacturing sites. See Note 22. Restructuring Plan to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.

Interest and other, net. Interest and other, net for the year ended June 30, 2023 was expense of $318 million compared to expense of $132 million in fiscal 2022, an increase of $186 million. Included in Interest and other, net, were interest expense on borrowings, Merger financing fees, foreign currency gains and losses, amortization of debt issuance costs, equity gains and losses from unconsolidated investments, and interest income on excess cash balances. The increase of $186 million in comparison to fiscal 2022 was driven by $166 million incremental interest expense due to the new debt assumed in the financing of the Merger, with $79 million of the fiscal 2022 interest expense related to funding both raised in advance of the closing of the Merger, and fees for financing to be funded contingent upon the close of the Merger, as well as $35 million incurred in the current year related to financing of the Merger. The increases were partially offset by $6 million lower net foreign currency losses and $5 million of incremental interest income.

Foreign currency losses were $11 million for the year ended June 30, 2023, primarily the result of volatility in the foreign exchange market, compared to $16 million of losses for the year ended June 30, 2022. The fiscal 2022 losses include a $24 million realized loss related the purchase of $345 million Euros to pay off the Euro based debt of Coherent, Inc. at transaction closing.

Income taxes. Our effective income tax rate for fiscal 2023 was 27%, compared to an effective tax rate of 17% last fiscal year. The difference between our effective tax rate and the U.S. statutory rate of 21% was due to research and development incentives in certain jurisdictions.

Segment Reporting

Revenues and operating income for our reportable segments are discussed below. Operating income differs from net earnings in that operating income excludes certain expenses, including interest, the impact of foreign exchange, and other miscellaneous expenses as reported. Management believes operating income to be a useful measure for investors, as it reflects the results of segment performance over which management has direct control and is used by management in its evaluation of segment performance. See Note 15. Segment and Geographic Reporting to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information on the Company's reportable segments and for the reconciliation of operating income to net earnings, which is incorporated herein by reference.

Networking ($ in millions)

	Year Ended June 30,		% Increase
	2023	2022	
Revenues	$ 2,341	$ 2,197	7 %
Operating income	$ 222	$ 232	(4)%

Revenues for the year ended June 30, 2023 for Networking increased 7% to $2,341 million, compared to $2,197 million for fiscal year 2022. The increase in revenues of $144 million during fiscal 2023 was primarily due to increased revenue in the communications market due to stronger demand in telecom and datacom.

Operating income for the year ended June 30, 2023 for Networking decreased 4% to $222 million, compared to operating income of $232 million for fiscal year 2022. The driver of the decreased operating income was the $56 million in restructuring charges, primarily severance, related to our Restructuring Plan, partially offset by strong sales, lower variable compensation costs and the leveraging of corporate resources across each of our three segments.

Materials ($ in millions)

	Year Ended June 30,		% Increase
	2023	2022	
Revenues	$ 1,350	$ 1,119	21 %
Operating income	$ 160	$ 219	(27)%

Revenues for the fiscal year ended June 30, 2023 for Materials increased 21% to $1,350 million, compared to revenues of $1,119 million for fiscal year 2022. The increase in revenues during fiscal 2023 was primarily driven by an increase in demand in the electronics end market from innovations in sensing products, partially offset by softer demand in the industrial end market.

Operating income for the fiscal year ended June 30, 2023 for Materials decreased 27%, with operating income of $160 million in fiscal 2023, compared to operating income of $219 million for fiscal year 2022. The decrease in operating income during fiscal 2023 was driven by $60 million in restructuring charges, primarily severance, related to our Restructuring Plan and $33 million for charges for impairment of certain tradename, customer list and technology intangibles. The increases were partially offset by lower variable compensation costs and lower IR&D spending. As a percentage of revenue, operating income decreased from 20% to 12% primarily due to lower gross margins and the fiscal 2023 restructuring charges, partially offset by lower IR&D spending and lower variable compensation. The lower gross margins as a percentage of revenue were driven by less favorable mix of revenues, higher costs related to the write-off of inventory for products that are being exited, underutilized operating capacity in several plants and shut down costs related to site consolidations.

Lasers ($ in millions)

	Year Ended June 30,		% Increase
	2023	2022	
Revenues	$ 1,469	$ —	N/.A
Operating income	$ (419)	$ —	N/A

Revenues for the fiscal year ended June 30, 2023 for Lasers were $1,469 million, with 74% in the industrial end market and 26% from the instrumentation end market.

Operating loss for the fiscal year ended June 30, 2023 for Lasers was $419 million. The loss was driven by $297 million of amortization expense related to the preliminary fair value of intangible assets acquired, $158 million of amortization of the preliminary fair value step-up on acquired inventory, $79 million of integration and site consolidation and shut down costs, one-time charges of $39 million for transaction fees and financing, and $18 million of nonrecurring share-based compensation.

Liquidity and Capital Resources

Historically, our primary sources of cash have been provided from operations, long-term borrowings, and advance funding from customers. Other sources of cash include proceeds from the issuance of equity, proceeds received from the exercises of stock options, and sale of equity investments and businesses. Our historic uses of cash have been for business acquisitions, capital expenditures, investments in research and development, payments of principal and interest on outstanding debt obligations, payments of debt and equity issuance costs to obtain financing and payments in satisfaction of employees' minimum tax obligations. Supplemental information pertaining to our sources and uses of cash for the periods indicated is presented as follows:

Sources (uses) of Cash (millions):

Year Ended June 30,	2024	2023	2022
Net cash provided by operating activities	$ 546	$ 634	$ 413
Net proceeds from debt and equity issuances, including noncontrolling interest holders	968	1,358	990
Proceeds from exercises of stock options and purchases of stock under employee stock purchase plan	42	24	18
Proceeds from long-term borrowings and revolving credit facilities	19	3,715	—
Payments on Convertible Debt and Finisar Notes	—	(4)	(15)
Cash paid for dividends	—	(28)	(35)
Debt issuance costs	—	(127)	(10)
Purchases of businesses, net of cash acquired	—	(5,489)	—
Effect of exchange rate changes on cash and cash equivalents and other items	(1)	(4)	34
Other investing and financing	(5)	(5)	(8)
Payments in satisfaction of employees' minimum tax obligations	(22)	(54)	(21)
Payments on existing debt and revolving credit facilities	(248)	(1,330)	(62)
Additions to property, plant & equipment	(347)	(436)	(314)

Net cash provided by operating activities:

Net cash provided by operating activities was $546 million during the current fiscal year ended June 30, 2024 compared to $634 million of cash provided by operating activities during the same period last fiscal year. The decrease in cash flows provided by operating activities during the year ended June 30, 2024 compared to the same period last fiscal year was primarily due to lower non-cash adjustments partially offset by lower losses.

Net cash provided by operating activities was $634 million and $413 million for the fiscal years ended June 30, 2023 and 2022, respectively. The increase in cash flows provided by operating activities during the fiscal year ended June 30, 2023 compared to the fiscal year ended June 30, 2022 was driven by improved management of working capital accounts.

Net cash used in investing activities:

Net cash used in investing activities was $0.4 billion for the fiscal year ended June 30, 2024, compared to net cash used of $5.9 billion for the same period last fiscal year. In fiscal 2023, $5.5 billion was used to fund the Merger. Cash used to fund capital expenditures decreased by $89 million year-over-year.

Net cash used in investing activities was $5.9 billion and $320 million for the fiscal years ended June 30, 2023 and 2022, respectively. In fiscal 2023, $5.5 billion was used to fund the Merger. Cash used to fund capital expenditures increased by $122 million during the fiscal year ended June 30, 2023 compared to the fiscal year ended June 30, 2022, to continue to increase capacity to meet the growing demand for our product portfolio.

Net cash provided by financing activities:

Net cash provided by financing activities was $0.8 billion for the fiscal year ended June 30, 2024, compared to net cash provided by financing activities of $3.6 billion for the same period last fiscal year. Financing inflows in the current year included the $1.0 billion contribution from noncontrolling interests and proceeds from employee stock purchases, partially offset by payments on existing debt and equity issuance costs related to the contribution from noncontrolling interests.

Net cash provided by financing activities was $3.6 billion for the year ended June 30, 2023 compared to net cash provided by financing activities of $863 million for the year ended June 30, 2022. Cash inflow for fiscal 2023 was from borrowings under the New Term Facilities, defined below, as well the net proceeds from the issuance of Coherent's Series B-2 Convertible Preferred Stock. Financing outflows included payments to settle the Company's existing senior credit facilities.

New Senior Credit Facilities

On July 1, 2022, Coherent entered into a Credit Agreement by and among the Company, the lenders, and other parties thereto, and JP Morgan Chase Bank, N.A., as administrative agent and collateral agent, which provides for senior secured financing of $4.0 billion, consisting of a term loan A credit facility (the "Term A Facility"), with an aggregate principal amount of $850 million, a term loan B credit facility (the "Term B Facility" and, together with the Term A Facility, the "Term Facilities"), with an aggregate principal amount of $2,800 million, and a revolving credit facility (the "Revolving Credit Facility" and, together with the Term Facilities, the "Senior Credit Facilities"), in an aggregate available amount of $350 million, including a letter of credit sub-facility of up to $50 million. On March 31, 2023, Coherent entered into Amendment No. 1 to the Credit Agreement, which replaced the adjusted LIBOR-based rate of interest therein with an adjusted Secured Overnight Financing Rate ("SOFR") based rate of interest. As amended, the Term A Facility and the Revolving Credit Facility each bear interest at an adjusted SOFR rate subject to a 0.10% floor plus a range of 1.75% to 2.50%, based on the Company's total net leverage ratio. The Term A Facility and the Revolving Credit Facility borrowings bear interest at adjusted SOFR plus 2.00% as of June 30, 2024. On April 2, 2024, Coherent entered into Amendment No. 2 to the Credit Agreement, under which the principal amount of term B loans outstanding under the Credit Agreement (the "Existing Term B Loans") were replaced with an equal amount of new term loans (the "New Term B Loans") having substantially similar terms as the Existing Term B Loans, except with respect to the interest rate applicable to the New Term B Loans and certain other provisions. As further amended, the New Term B Loans bear interest at a SOFR rate (subject to a 0.50% floor) plus 2.50% as of June 30, 2024. The maturity of the New Term Loans and revolving credit facility remains unchanged. In relation to the Term Facilities, the Company incurred expense of $237 million for the fiscal year ended June 30, 2024, which is included in Interest expense in the Consolidated Statements of Earnings (Loss). On July 1, 2023, our interest rate cap became effective, which together with our interest rate swap, reduced interest expense by $45 million during the fiscal year ended June 30, 2024.

During the fiscal year ended June 30, 2024, the Company made payments of $225 million for the Term Facilities, including voluntary prepayments of $155 million.

As of June 30, 2024, the Company had no borrowings outstanding under the Revolving Credit Facility.

Weighted Average Interest Rate

The weighted average interest rate of total borrowings was 7% and 6% for the years ended June 30, 2024 and 2023, respectively.

Our cash position, borrowing capacity and debt obligations are as follows (in millions):

	June 30, 2024	June 30, 2023
Cash and cash equivalents	$ 926	$ 821
Restricted cash, current	174	12
Restricted cash, non-current	690	4
Available borrowing capacity under Revolving Credit Facility	346	348
Total debt obligations	4,100	4,310

Other Liquidity

On December 4, 2023, the Company consummated two investment agreements under which Silicon Carbide LLC, a Company subsidiary, received $1.0 billion cash in exchange for 25% of the equity of that entity. Such funds will be used primarily to fund future capital expansion, including the previously-announced capital that Coherent intended to invest in its silicon carbide business. As a result, the transaction is enabling Coherent to allocate the capital it had intended to invest in this business unit to other corporate purposes, thus increasing its available free cash flow which will provide greater financial and operational flexibility. See Note 12. Noncontrolling Interests to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.

The Company believes existing cash, cash flow from operations, and available borrowing capacity from its Senior Credit Facilities will be sufficient to fund its needs for working capital, capital expenditures, repayment of scheduled long-term borrowings and lease obligations, investments in IR&D, and internal and external growth objectives at least through fiscal year 2025.

Our cash and cash equivalent balances are generated and held in numerous locations throughout the world, including amounts held outside the United States. As of June 30, 2024, we held approximately $870 million of cash, cash equivalents and restricted cash outside of the United States. Generally, cash balances held outside the United States could be repatriated to the United States.

At June 30, 2024, we had $864 million of restricted cash, which includes $858 million at our Silicon Carbide LLC that is restricted for use by only that subsidiary.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements as defined by Regulation S-K of the Securities Act of 1933.

Contractual Obligations

As of June 30, 2024, in the ordinary course of business, we had total estimated purchase commitments from vendors of approximately $751 million. In addition, as of June 30, 2024, we had obligations under our operating leases of approximately $258 million, $52 million of which will be paid in the fiscal year 2025.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

MARKET RISKS

We are exposed to market risks arising from adverse changes in foreign currency exchange rates and interest rates. In the normal course of business, we use a variety of techniques and derivative financial instruments as part of our overall risk management strategy, which is primarily focused on our exposure in relation to the Chinese Renminbi, Euro, Swiss Franc, Japanese Yen, Singapore Dollar and Korean Won. No significant changes have occurred in the techniques and instruments used.

Interest Rate Risk

As of June 30, 2024, our total borrowings include variable rate borrowings, which expose us to changes in interest rates. In November 2019, we entered into an interest rate swap contract, amended on March 20, 2023, to limit the exposure of our variable interest rate debt by effectively converting a portion of interest payments to fixed interest rate debt. On February 23, 2022, we entered into an interest rate cap (the "Cap"), amended on March 20, 2023, with an effective date of July 1, 2023. If we had not effectively hedged our variable rate debt, a change in the interest rate of 100 basis points on these variable rate borrowings would have resulted in additional interest expense of $33 million for the year ended June 30, 2024.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is set forth in our Consolidated Financial Statements contained in this Annual Report on Form 10-K. Specific financial statements can be found at the pages listed below:

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management's Responsibility for Preparation of the Financial Statements

Management is responsible for the preparation of the Consolidated Financial Statements included in this Annual Report on Form 10-K. The Consolidated Financial Statements were prepared in accordance with the accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management. The other financial information contained in this Annual Report on Form 10-K is consistent with the Consolidated Financial Statements.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rules 13a-159f) and 15(d)-15(f). The Company's internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of the Company's Consolidated Financial Statements, as well as reasonable assurance with respect to safeguarding the Company's assets from unauthorized use or disposition.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement presentation and other results of such systems.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of June 30, 2024. In making this evaluation, management used the criteria set forth by the *Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013)*. Management's evaluation included reviewing the documentation of its controls, evaluating the design effectiveness of controls and testing their operating effectiveness. Based on the evaluation, management concluded that as of June 30, 2024, the Company's internal controls over financial reporting were effective.

Ernst & Young LLP, an independent registered public accounting firm, has issued its report on the effectiveness of our internal control over financial reporting as of June 30, 2024, which report is included herein.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Coherent Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Coherent Corp. and subsidiaries (the Company) as of June 30, 2024 and 2023, the related consolidated statements of earnings (loss), comprehensive income (loss), shareholders' equity and mezzanine equity and cash flows for each of the three years in the period ended June 30, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at June 30, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of June 30, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated August 16, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

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

Goodwill Impairment Assessment - Lasers Reporting Unit

Description of the Matter	At June 30, 2024, the balance of the Company’s goodwill related to the Lasers reporting unit was $3.2 billion. As discussed in Note 1 to the consolidated financial statements, goodwill is reviewed annually for impairment, or more frequently if impairment indicators arise. The assessment of goodwill for impairment requires a comparison of the fair value of each reporting unit that has goodwill associated with its operations to its carrying amount, including goodwill. If the Company’s carrying amount of a reporting unit exceeds its fair value, an impairment loss would be measured as the excess of the carrying value over the calculated fair value. Auditing the Company’s annual goodwill impairment test for the Lasers reporting unit is complex because it involves making assumptions about the timing and amount of the forecasted future net cash flows of the reporting unit. The fair value estimate can be sensitive to significant assumptions such as revenue and the selected discount rate, which is based on a risk-adjusted weighted average cost of capital. These significant assumptions are forward looking and could be impacted by future economic conditions.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company’s goodwill impairment evaluation process, including controls over management’s review of the assumptions described above. Our audit procedures to test management’s impairment evaluation of the Lasers reporting unit included, among others, assessing the valuation methodology and assumptions discussed above, and the underlying data used to develop such assumptions. For example, we compared certain assumptions to current industry, market and economic trends. Where appropriate, we evaluated whether changes to the Company’s business and other factors would affect the assumptions. We also assessed the historical accuracy of management’s estimates and performed independent sensitivity analyses. We involved our valuation specialists to assist us in evaluating the methodologies and auditing the assumptions used to calculate the estimated fair value of the Lasers reporting unit.

/s/ Ernst & Young LLP

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

Pittsburgh, Pennsylvania

August 16, 2024

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Coherent Corp.

Opinion on Internal Control Over Financial Reporting

We have audited Coherent Corp. and subsidiaries' internal control over financial reporting as of June 30, 2024, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Coherent Corp. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of June 30, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of June 30, 2024 and 2023, the related consolidated statements of earnings (loss), comprehensive income (loss), shareholders' equity and mezzanine equity and cash flows for each of the three years in the period ended June 30, 2024, and the related notes and schedule listed in the Index at Item 15(a)(2) and our report dated August 16, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Pittsburgh, Pennsylvania

August 16, 2024

Coherent Corp. and Subsidiaries
Consolidated Balance Sheets
($000)

June 30,	2024	2023
Assets		
Current Assets		
Cash and cash equivalents	$ 926,033	$ 821,310
Restricted cash, current	174,008	12,023
Accounts receivable - less allowance for doubtful accounts of $9,511 and $8,005 at June 30, 2024 and June 30, 2023, respectively	848,542	901,531
Inventories	1,286,404	1,272,333
Prepaid and refundable income taxes	26,909	28,271
Prepaid and other current assets	398,203	216,530
Total Current Assets	3,660,099	3,251,998
Property, plant & equipment, net	1,817,259	1,782,035
Goodwill	4,464,329	4,512,700
Other intangible assets, net	3,503,247	3,814,684
Deferred income taxes	40,966	37,748
Restricted cash, non-current	689,645	4,233
Other assets	313,089	307,735
Total Assets	$ 14,488,634	$ 13,711,133
Liabilities. Mezzanine Equity and Shareholders' Equity		
Current Liabilities		
Current portion of long-term debt	$ 73,770	$ 74,836
Accounts payable	631,548	405,308
Accrued compensation and benefits	212,458	175,564
Operating lease current liabilities	40,580	38,271
Accrued income taxes payable	90,705	74,488
Other accrued liabilities	294,706	310,281
Total Current Liabilities	1,343,767	1,078,748
Long-term debt	4,026,448	4,234,962
Deferred income taxes	784,374	780,307
Operating lease liabilities	162,355	140,748
Other liabilities	225,411	247,402
Total Liabilities	6,542,355	6,482,167
Mezzanine Equity		
Series B redeemable convertible preferred stock, no par value, 5% cumulative; issued - 215,000 shares at June 30, 2024 and June 30, 2023; redemption value - $2,427,860 and $2,309,966 as of June 30, 2024 and June 30, 2023, respectively	2,364,772	2,241,415
Shareholders' Equity		
Series A preferred stock, no par value, 6% cumulative; issued - 0 and 2,300,000 shares at June 30, 2024 and June 30, 2023, respectively	—	445,319
Common stock, no par value; authorized - 300,000,000 shares; issued - 168,406,323 shares at June 30, 2024; issued - 154,719,413 shares at June 30, 2023	4,857,657	3,781,211
Accumulated other comprehensive income (AOCI)	2,640	109,726
Retained earnings	664,940	944,416
	5,525,237	5,280,672
Treasury stock, at cost - 15,626,740 shares at June 30, 2024 and 15,135,711 shares at June 30, 2023	(315,122)	(293,121)
Total Coherent Corp. Shareholders' Equity	5,210,115	4,987,551
Noncontrolling interests (NCI)	371,392	—
Total Equity	5,581,507	4,987,551
Total Liabilities, Mezzanine Equity and Equity	$ 14,488,634	$ 13,711,133

See Notes to Consolidated Financial Statements

Coherent Corp. and Subsidiaries
Consolidated Statements of Earnings (Loss)

Year Ended June 30,	2024	2023	2022
($000, except per share data)			
Revenues	$ 4,707,688	$ 5,160,100	$ 3,316,616
Costs, Expenses and Other Expense (Income)			
Cost of goods sold	3,251,724	3,541,817	2,051,120
Internal research and development	478,788	499,603	377,106
Selling, general and administrative	854,001	1,036,699	474,096
Restructuring charges	27,054	119,101	—
Interest expense	288,475	286,872	121,254
Other (income) expense, net	(44,707)	31,566	11,233
Total Costs, Expenses and Other Expense	4,855,335	5,515,658	3,034,809
Earnings (Loss) Before Income Taxes	(147,647)	(355,558)	281,807
Income Tax Expense (Benefit)	11,117	(96,100)	47,048
Net Earnings (Loss)	(158,764)	(259,458)	234,759
Net Loss Attributable to Noncontrolling Interests	(2,610)	—	—
Net Earnings (Loss) Attributable to Coherent Corp.	(156,154)	(259,458)	234,759
Less: Dividends on Preferred Stock	123,357	144,212	68,225
Net Earnings (Loss) Available to the Common Shareholders	$ (279,511)	$ (403,670)	$ 166,534
Basic Earnings (Loss) Per Share	$ (1.84)	$ (2.93)	$ 1.57
Diluted Earnings (Loss) Per Share	$ (1.84)	$ (2.93)	$ 1.45

See Notes to Consolidated Financial Statements

Coherent Corp. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)

Year Ended June 30,	**2024**	**2023**	**2022**
($000)			
Net Earnings (Loss)	$ (158,764)	$ (259,458)	$ 234,759
Other Comprehensive Income (Loss):			
Foreign currency translation adjustments	(81,889)	87,927	(89,967)
Change in fair value of interest rate swap, net of taxes of ($6,268), $2,122, and $11,901 for the years ended June 30, 2024, 2023, and 2022, respectively	(22,885)	7,749	43,508
Change in fair value of interest rate cap, net of taxes of $800, $5,934 and $3,818 for the years ended June 30, 2024, 2023 and 2022, respectively	2,689	22,322	14,306
Pension adjustment, net of taxes of ($1,718), ($1,682) and $3,856 for the years ended June 30, 2024, 2023, and 2022, respectively	(7,443)	(6,105)	15,719
Other comprehensive income (loss)	(109,528)	111,893	(16,434)
Comprehensive Income (Loss)	(268,292)	(147,565)	218,325
Comprehensive Loss Attributable to Noncontrolling Interests	(2,610)	—	—
Foreign Currency Translation Adjustments Attributable to Noncontrolling Interests	429	—	—
Comprehensive Income (Loss) Attributable to Coherent Corp.	$ (266,111)	$ (147,565)	$ 218,325

See Notes to Consolidated Financial Statements

Coherent Corp. and Subsidiaries
Consolidated Statements of Shareholders' Equity and Mezzanine Equity

	Common Stock		Preferred Stock				Treasury Stock				Mezzanine Equity	
(000, including share amounts)	Shares	Amount	Shares	Amount	AOCI	Retained Earnings	Shares	Amount	NCI	Total	Preferred Shares	Amount
Balance - June 30, 2021	119,127	$ 2,028,273	2,300	$ 445,319	$ 14,267	$ 1,136,777	(13,640)	$ (218,466)	$ —	$ 3,406,170	75	$ 726,178
Share-based and deferred compensation activities	1,796	92,667	—	—	—	—	(333)	(20,888)	—	71,779	—	—
Net earnings	—	—	—	—	—	234,759	—	—	—	234,759	—	—
Foreign currency translation adjustments	—	—	—	—	(89,967)	—	—	—	—	(89,967)	—	—
Change in fair value of interest rate swap, net of taxes of $11,901	—	—	—	—	43,508	—	—	—	—	43,508	—	—
Change in fair value of interest rate cap, net of taxes of $3,818	—	—	—	—	14,306	—	—	—	—	14,306	—	—
Pension adjustment, net of taxes of $3,856	—	—	—	—	15,719	—	—	—	—	15,719	—	—
Dividends	—	—	—	—	—	(68,327)	—	—	—	(68,327)	—	40,625
Adjustments for ASU 2020-06	—	(56,388)	—	—	—	44,916	—	—	—	(11,472)	—	—
Balance - June 30, 2022	120,923	$ 2,064,552	2,300	$ 445,319	$ (2,167)	$ 1,348,125	(13,973)	$ (239,354)	$ —	$ 3,616,475	75	$ 766,803
Share-based and deferred compensation activities	4,029	171,128	—	—	—	—	(1,164)	(53,767)	—	117,361	—	—
Coherent acquisition	22,588	1,207,591	—	—	—	—	—	—	—	1,207,591	—	—
Convertible debt conversions	7,181	337,940	—	—	—	—	—	—	—	337,940	—	—
Net loss	—	—	—	—	—	(259,458)	—	—	—	(259,458)	—	—
Foreign currency translation adjustments	—	—	—	—	87,927	—	—	—	—	87,927	—	—
Change in fair value of interest rate swap, net of taxes of $2,122	—	—	—	—	7,749	—	—	—	—	7,749	—	—
Change in fair value of interest rate cap, net of taxes of $5,934	—	—	—	—	22,322	—	—	—	—	22,322	—	—
Issuance of Series B shares	—	—	—	—	—	—	—	—	—	—	140	1,358,000
Pension adjustment, net of taxes of $(1,682)	—	—	—	—	(6,105)	—	—	—	—	(6,105)	—	—
Dividends	—	—	—	—	—	(144,251)	—	—	—	(144,251)	—	116,612
Balance - June 30, 2023	154,721	$ 3,781,211	2,300	$ 445,319	$ 109,726	$ 944,416	(15,137)	$ (293,121)	$ —	$ 4,987,551	215	$ 2,241,415
Share-based and deferred compensation activities	3,447	166,800	—	—	—	—	(492)	(22,001)	—	144,799	—	—
Conversion of Series A preferred stock	10,240	445,319	(2,300)	(445,319)	—	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	(156,154)	—	—	(2,610)	(158,764)	—	—
Foreign currency translation adjustments	—	—	—	—	(82,318)	—	—	—	429	(81,889)	—	—
Change in fair value of interest rate swap, net of taxes of $(6,268)	—	—	—	—	(22,885)	—	—	—	—	(22,885)	—	—
Change in fair value of interest rate cap, net of taxes of $800	—	—	—	—	2,689	—	—	—	—	2,689	—	—
Pension adjustment, net of taxes of $(1,718)	—	—	—	—	(7,443)	—	—	—	—	(7,443)	—	—
Dividends	—	—	—	—	—	(123,322)	—	—	—	(123,322)	—	123,357
Sale of shares to noncontrolling interests, net of issuance costs of $31,840 and taxes of $127,389	—	464,327	—	—	2,871	—	—	—	373,573	840,771	—	—
Balance - June 30, 2024	168,408	$ 4,857,657	—	$ —	$ 2,640	$ 664,940	(15,629)	$ (315,122)	$ 371,392	$ 5,581,507	215	$ 2,364,772

See Notes to Consolidated Financial Statements

Coherent Corp. and Subsidiaries
Consolidated Statements of Cash Flows

Year Ended June 30,	2024	2023	2022
($000)			
Cash Flows from Operating Activities			
Net earnings (loss)	$ (158,764)	$ (259,458)	$ 234,759
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:			
Depreciation	271,601	267,562	207,132
Amortization	288,160	414,125	79,647
Share-based compensation expense	126,049	148,872	73,214
Non-cash restructuring charges	16,557	119,456	—
Amortization of discount on convertible debt and debt issuance costs	17,652	19,850	18,807
Losses on disposals of property, plant & equipment	758	2,440	617
Unrealized losses (gains) on foreign currency remeasurements and transactions	(10,556)	(3,549)	1,167
Loss (earnings) from equity investments	51	66	(2,190)
Deferred income taxes	(112,096)	(206,822)	(8,154)
Loss on debt extinguishment	1,978	6,855	—
Increase (decrease) in cash from changes in (net of effects of acquisitions):			
Accounts receivable	60,581	68,315	(55,193)
Inventories	(23,196)	174,136	(230,882)
Accounts payable	205,044	(83,330)	97,053
Contract liabilities	(72,818)	(18,957)	26,614
Income taxes	12,251	28,651	17,961
Accrued compensation and benefits	36,894	(60,595)	(9,382)
Other operating net assets (liabilities)	(114,415)	16,408	(37,838)
Net cash provided by operating activities	545,731	634,025	413,332
Cash Flows from Investing Activities			
Additions to property, plant & equipment	(346,816)	(436,060)	(314,332)
Purchases of businesses, net of cash acquired	—	(5,488,556)	—
Other investing activities	(3,897)	(4,010)	(5,750)
Net cash used in investing activities	(350,713)	(5,928,626)	(320,082)
Cash Flows from Financing Activities			
Sale of shares to noncontrolling interests	1,000,000	—	—
Proceeds from borrowings of Term B Facility	—	2,800,000	—
Proceeds from issuance of Series B preferred shares	—	1,400,000	—
Proceeds from borrowings of Term A Facility	—	850,000	—
Proceeds from borrowings of revolving credit facilities	18,966	65,000	—
Proceeds from issuance of Senior Notes	—	—	990,000
Payments on existing debt	(228,802)	(1,265,175)	(62,050)
Payments on borrowings under Revolving Credit Facilities	(19,027)	(65,000)	—
Payments on convertible notes	—	(3,561)	—
Payment of Finisar Notes	—	—	(14,888)
Debt issuance costs	—	(126,516)	(10,197)
Equity issuance costs	(31,840)	(42,000)	—
Proceeds from exercises of stock options and purchases of stock under employee stock purchase plan	42,297	24,167	17,858
Payments in satisfaction of employees' minimum tax obligations	(22,315)	(54,172)	(21,249)
Cash dividends paid	—	(27,600)	(34,508)
Other financing activities	(1,007)	(1,124)	(2,013)
Net cash provided by financing activities	758,272	3,554,019	862,953
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(1,170)	(4,223)	34,276
Net increase (decrease) in cash and cash equivalents, and restricted cash	952,120	(1,744,805)	990,479
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	837,566	2,582,371	1,591,892
Cash, Cash Equivalents, and Restricted Cash at End of Period	$ 1,789,686	$ 837,566	$ 2,582,371

Supplemental Information			
Cash paid for interest	$ 312,879	$ 282,835	$ 57,314
Cash paid for income taxes	$ 97,295	$ 89,567	$ 50,000
Non-Cash Investing and Financing Activities:			
Additions to property, plant & equipment included in accounts payable	$ 63,286	$ 36,777	$ 84,890
Conversion of Series A preferred stock to common stock	$ 445,319	$ —	$ —

See Notes to Consolidated Financial Statements

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Consolidated Balance Sheets that sum to the total of the same amounts shown in the Consolidated Statements of Cash Flows. At June 30, 2024, we had $864 million of restricted cash.

Year Ended June 30,	**2024**	**2023**	**2022**
($000)			
Cash and cash equivalents	$ 926,033	$ 821,310	$ 2,582,371
Restricted cash, current	174,008	12,023	—
Restricted cash, non-current	689,645	4,233	—
Total cash, cash equivalents, and restricted cash shown in the Consolidated Statements of Cash Flows	$ 1,789,686	$ 837,566	$ 2,582,371

See Notes to Consolidated Financial Statements

Coherent Corp. and Subsidiaries
Notes to Consolidated Financial Statements

Note 1. Nature of Business and Summary of Significant Accounting Policies

Nature of Business. Coherent Corp. ("Coherent," the "Company," "we," "us" or "our"), a global leader in materials, networking, and lasers, is a vertically-integrated manufacturing company that develops, manufactures, and markets engineered materials, optoelectronic components and devices, and lasers for use in the industrial, communications, electronics and instrumentation markets. The Company markets its products through its direct sales force and through distributors and agents.

The Company uses certain uncommon materials and compounds to manufacture its products. Some of these materials are available from only one proven outside source. The continued high quality of these materials is critical to the stability of our manufacturing yields. We have not experienced material production delays due to a shortage of materials. However, we do occasionally experience problems associated with vendor-supplied materials not meeting specifications for quality or purity. A significant failure of our suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a material adverse effect on our results of operations.

Consolidation. The Consolidated Financial Statements include the accounts of the Company and all of its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. Certain prior year amounts have been reclassified for consistency with the current year presentation.

Use of Estimates. The preparation of financial statements in conformity with generally accepted accounting principles in the United States ("U.S. GAAP") requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Although these estimates are based on management's best knowledge of current events and actions Coherent may undertake in the future, actual results may ultimately differ from the estimates.

Foreign Currency Translation. For all foreign subsidiaries whose functional currency is not the U.S. dollar, the functional currency is the local currency. Assets and liabilities of those operations are translated into U.S. dollars using period-end exchange rates while income and expenses are translated using the average exchange rates for the reporting period. Translation adjustments are recorded as Accumulated other comprehensive income (loss) within Shareholders' equity in the accompanying Consolidated Balance Sheets.

Cash, Cash Equivalents, and Restricted Cash. We consider highly liquid investment instruments with an original maturity of three months or less to be cash equivalents. As of June 30, 2024, we had restricted cash of $864 million that is restricted for a specific purpose, with $174 million and $690 million recorded in Restricted cash, current and Restricted cash, non-current, respectively, on our Consolidated Balance Sheet.

Allowance for Expected Credit Losses. We recognize expected credit losses resulting from the inability of our customers to make required payments through an allowance account that is measured each reporting date. We estimate credit losses over the life of our trade accounts receivable using a combination of historical loss data, current credit conditions, specific customer circumstances, and reasonable and supportable forecasts of future economic conditions.

Inventories. Inventories are valued at the lower of cost or net realizable value, with cost determined on the first-in, first-out basis. Inventory costs include material, labor and manufacturing overhead. In evaluating the net realizable value of inventory, management also considers other factors, including known trends and market conditions. We generally record a reduction to the carrying value of inventory as a charge against earnings for all products on hand more than 12 to 24 months, depending on the nature of the products that have not been sold to customers or cannot be further manufactured for sale to alternative customers. An additional charge may be recorded for product on hand that is in excess of product sold to customers over the same periods noted above.

Property, Plant and Equipment. Property, plant and equipment are carried at cost or fair value upon acquisition. Major improvements are capitalized, while maintenance and repairs are generally expensed as incurred. We review our property, plant and equipment and other long-lived assets for impairment whenever events or circumstances indicate that the carrying amounts may not be recoverable. Depreciation on property, plant and equipment and amortization on finance lease right-of-use assets for financial reporting purposes is computed primarily by the straight-line method over the estimated useful lives for building, building improvements and land improvements of 10 to 40 years and 3 to 20 years for machinery and equipment.

Leases. Leases are recognized under Accounting Standards Codification 842, Leases. The Company determines whether a contract contains a lease at contract inception. A contract contains a lease if there is an identified asset and the Company has the right to control the asset. Operating lease right-of-use ("ROU") assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and lease liabilities are recognized at commencement date based on the present value of lease payments over the lease term. We use the incremental borrowing rate in determining the present value of lease payments, unless the implicit rate is readily determinable. If lease terms include options to extend or terminate the lease, the ROU asset and lease liability are measured based on the reasonably certain decision. We have lease agreements with lease and non-lease components, which are accounted for as a single lease component for all classes of leased assets for which the Company is the lessee. Additionally, for certain equipment leases, the portfolio approach is applied to account for the operating lease ROU assets and lease liabilities. In the Consolidated Statements of Earnings (Loss), lease expense for operating lease payments is recognized on a straight-line basis over the lease term. For finance leases, interest expense is recognized on the lease liability and the ROU asset is amortized over the lease term. Some leasing arrangements require variable payments that are dependent upon usage or output, or may vary for other reasons, such as insurance or tax payments. Variable lease payments are recognized as incurred, and are not presented as part of the ROU asset or lease liability. See Note 13. Leases for further information.

Business Combinations. The Company accounts for business combinations by establishing the acquisition-date fair value as the measurement for all assets acquired and liabilities assumed. Certain provisions of U.S. GAAP prescribe, among other things, the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration) and the exclusion of transaction and acquisition-related restructuring costs from acquisition accounting.

On July 1, 2022, we acquired Coherent, Inc. The significant accounting policies of Coherent, Inc. have been aligned to conform to those of the Company, and the consolidated financial statements include the results of Coherent, Inc. as of its acquisition date. See Note 3. Coherent Acquisition for further information.

Goodwill. The excess purchase price over the fair value allocated to identifiable tangible and intangible net assets of businesses acquired is reported as goodwill in the accompanying Consolidated Balance Sheets. We test goodwill for impairment at least annually as of April 1, or when events or changes in circumstances indicate that goodwill might be impaired. The evaluation of impairment involves comparing the current fair value of our reporting units to the recorded value (including goodwill). We use a discounted cash flow ("DCF") model and/or a market analysis to determine the fair value of our reporting units. A number of assumptions and estimates are involved in estimating the forecasted cash flows used in the DCF model, including markets and market shares, sales volume and pricing, costs to produce, working capital changes and income tax rates. Management considers historical experience and all available information at the time the fair values of the reporting units are estimated. Goodwill impairment is measured as the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill.

We have the option to perform a qualitative assessment of goodwill prior to completing the quantitative assessment described above to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. If we conclude that this is the case, we must perform the quantitative assessment. Otherwise, we will forego the quantitative assessment and do not need to perform any further testing. As of April 1 of fiscal years 2024 and 2023, we completed our annual impairment tests of our reporting units using the quantitative assessment. For fiscal year 2024, the fair values of the reporting units were determined using a discounted cash flow analysis with projected financial information based on our most recently completed long-term strategic planning processes and also considered the current financial performance compared to our prior projections of the reporting units, as well as a market analysis. As of April 1, 2024, the fair value of each of our reporting units exceeded their carrying values.

Due to the cyclical nature of our business, and the other factors described in the section on Risk Factors set forth in Item 1A of this Annual Report on Form 10-K, the profitability of our individual reporting units may periodically be affected by downturns in customer demand, operational challenges and other factors. If material adverse conditions occur that impact one or more of our reporting units, our determination of future fair value might not support the carrying amount of one or more of our reporting units, and the related goodwill would need to be impaired.

Intangibles. Intangible assets are initially recorded at their cost or fair value upon acquisition. Finite-lived intangible assets are amortized using the straight-line method over the estimated useful lives of the assets ranging from 1 to 20 years. Indefinite-lived intangible assets are not amortized but tested annually for impairment at April 1, or when events or changes in circumstances indicate that indefinite-lived intangible assets might be impaired. As of April 1 of fiscal 2024, the Company completed a quantitative impairment test of the Coherent trade name acquired in the Merger using the relief from royalty method and determined that its fair value is well in excess of its carrying value.

Series A Mandatory Convertible Preferred Stock. The Mandatory Convertible Preferred Stock was initially measured at fair value, less underwriting discounts and commissions and offering expenses paid by the Company. The Preferred Stock's dividends were cumulative, at 6% per annum. All outstanding shares of Mandatory Convertible Preferred Stock were converted to 10,240,290 shares of Company Common Stock on July 3, 2023, at a conversion ratio of 4.4523, and no shares of Mandatory Convertible Preferred Stock are currently issued and outstanding. See Note 10. Equity and Redeemable Preferred Stock for further information.

Series B Convertible Preferred Stock. The Series B-1 Convertible Preferred Stock is initially measured at fair value less issuance costs, accreted to its redemption value over a ten-year period (using the effective interest method) with such accretion accounted for as deemed dividends and reductions to Net Earnings (Loss) Available to the Common Shareholders. The Series B-2 Convertible Preferred Stock is initially measured at fair value less issuance costs, accreted to its redemption value over a ten-year period (using the effective interest method) with such accretion accounted for as deemed dividends and reductions to Net Earnings (Loss) Available to the Common Shareholders. See Note 10. Equity and Redeemable Preferred Stock for further information.

Noncontrolling Interests. The Company accounts for noncontrolling interests in accordance with ASC Topic 810-10-45, which requires the Company to present noncontrolling interests as a separate component of total shareholders' equity on the Consolidated Balance Sheets and the consolidated net earnings (loss) attributable to its noncontrolling interests be clearly identified and presented on the face of the Consolidated Statements of Earnings (Loss) and Consolidated Statements of Comprehensive Income (Loss). See Note 12. Noncontrolling Interests for further information on the noncontrolling interests in our Silicon Carbide LLC subsidiary.

Commitments and Contingencies. Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred. Such liabilities are adjusted as further information develops or circumstances change. Our customers may discover defects in our products after the products have been fully deployed and operated under peak stress conditions. If we are unable to correct defects or other problems, we could experience, among other things, loss of customers, increased costs of product returns and warranty expenses, damage to our brand reputation, failure to attract new customers or achieve market acceptance, diversion of development and engineering resources, or legal action by our customers. We had no material loss contingency liabilities at June 30, 2024 or 2023 related to commitments and contingencies.

Income Taxes. Deferred income tax assets and liabilities are determined based on the differences between the Consolidated Financial Statements and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount more likely than not to be realized. The Company's accounting policy is to apply acquired deferred tax liabilities to pre-existing deferred tax assets before evaluating the need for a valuation allowance for acquired deferred tax assets.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. The amount of unrecognized tax benefits is adjusted for changes in facts and circumstances. For example, adjustments could result from significant amendments to existing tax law and the issuance of regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. The Company believes that its estimates for uncertain tax positions are appropriate and sufficient to pay assessments that may result from examinations of its tax returns. The Company recognizes both accrued interest and penalties related to unrecognized tax benefits in income tax expense.

Revenue Recognition. Revenue is recognized under Accounting Standards Codification 606, Revenue from Contracts with Customers (ASC 606), when or as obligations under the terms of a contract with our customer have been satisfied and control has transferred to the customer. We have elected the practical expedient to exclude all taxes from the measurement of the transaction price.

For contracts with commercial customers, which comprise the majority of our performance obligations, ownership of the goods and associated revenue are generally transferred to customers at a point in time, generally upon shipment of a product to the customer or delivery of the product to the customer and without significant judgments. The majority of contracts typically require payment within 30 to 90 days after transfer of ownership to the customer.

We periodically enter into contracts in which a customer may purchase a combination of goods and/or services, such as products with maintenance contracts or extended warranty. Maintenance contracts and extended warranties are sold separately from products, and represent a distinct performance obligation. Revenue related to the performance obligation for maintenance contracts and extended warranties is recognized over time as the customer simultaneously receives and consumes the benefits provided by us.

Service revenue includes repairs, tolling arrangements and installation. Repairs, tolling and installation activities are usually completed in a short period of time (normally less than one month) and therefore recorded at a point in time when the services are completed. The majority of contracts typically require payment within 30 to 90 days after performance of the service.

Non-recurring engineering arrangements are typically recognized as product revenue over time under either the time and material practical expedient, as the entity has a right to consideration from a customer, in an amount that corresponds directly with the value to the customer of the entity's performance completed to date, or under the output and input method. The majority of contracts typically require payment within 30 to 90 days.

Our revenue recognition policy is consistently applied across our segments, product lines, services, and geographical locations. For the periods covered herein, we measure revenue based on the amount of consideration it expects to be entitled to in exchange for products or services, reduced by the amount of variable consideration related to products expected to be returned. We determine variable consideration, which primarily consists of product returns and distributor sales price reductions resulting from price protection agreements, by estimating the impact of such reductions based on historical analysis of such activity.

Under ASC 606, we expense sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within selling, general and administrative expenses ("SG&A"). Costs for freight and shipping are generally recorded in cost of goods sold when control over products has transferred to the customer.

We offer an assurance-type limited warranty that products will be free from defects in materials and workmanship. We establish an accrual for estimated warranty expenses at the time revenue is recognized. The warranty is typically one year, although can be longer periods for certain products, and is typically limited to either (1) the replacement or repair of the product or (2) a credit against future purchases.

We believe that disaggregating revenue by end market provides the most relevant information regarding the nature, amount, timing, and uncertainty of revenues and cash flows. See Note 4. Revenue from Contracts with Customers for further information.

Internal Research and Development. Internal research and development ("IR&D") expenses include salaries, contractor and consultant fees, supplies and materials, as well as costs related to other overhead such as depreciation, facilities, utilities and other departmental expenses. The costs we incur with respect to internally developed technology, including allocations of our wafer fabrication and other manufacturing facilities and resources utilized to support R&D programs, are included in IR&D expenses as incurred.

Share-Based Compensation. Share-based compensation arrangements require the recognition in net earnings (loss) of the grant date fair value of share-based compensation (for equity-classified awards). We recognize the share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period, net of forfeitures. The estimated annualized forfeitures are based on our historical experience of pre-vesting cancellations. We will record additional expense in future periods if the actual forfeiture rate is lower than estimated, and will adjust expense in future periods if the actual forfeitures are higher than estimated. See Note 14. Share-Based Compensation for a description of our share-based compensation plans and the assumptions we use to calculate the fair value of share-based compensation.

Earnings per Share. Basic earnings (loss) per share is computed by dividing net earnings (loss) available to the common shareholders by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings (loss) per share is computed by dividing the diluted earnings (loss) available to the common shareholders by the weighted-average number of shares of common stock and potentially dilutive shares of common stock outstanding during the period. If there is a net loss for the period, diluted earnings per share is the same as basic earnings per share. See Note 11. Earnings Per Share for further information.

Accumulated Other Comprehensive Income (Loss). Accumulated other comprehensive income (loss) is a measure of all changes in shareholders' equity that result from transactions and other economic events in the period other than transactions with owners. Accumulated other comprehensive income (loss) is a component of shareholders' equity and consists of accumulated foreign currency translation adjustments, changes in the fair value of interest rate swap and cap derivative instruments, and pension adjustments.

Fair Value Measurements. We apply fair value accounting for all financial assets and liabilities that are required to be recognized or disclosed at fair value in the Consolidated Financial Statements. Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, we consider the principal or most advantageous market in which we would transact, and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions and credit risk.

Note 2. Recently Issued and Adopted Financial Accounting Standards

SEC Final Rule: Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure

In July 2023, the U.S. Securities and Exchange Commission (the “SEC”) adopted the final rule under SEC Release No. 33-11216, Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure, requiring current reporting about material cybersecurity incidents and annual disclosures on management’s processes for assessing, identifying, and managing material cybersecurity risks, the material impacts of cybersecurity threats and previous cybersecurity incidents, the Board of Directors’ (the “Board”) oversight of cybersecurity risks, and management’s role and expertise in assessing and managing material cybersecurity risks. SEC Release No. 33-11216 did not have a material impact on the Company’s consolidated financial statements and disclosures.

Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures

In November 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-07 - Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures. This ASU improves reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. This ASU is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is evaluating the impact this will have on the Company’s consolidated financial statements and disclosures.

Income Taxes (Topic 740): Improvements to Income Tax Disclosures

In December 2023, the FASB issued ASU 2023-09, “Income Taxes (Topic 740): Improvements to Income Tax Disclosures” (“ASU 2023-09”). ASU 2023-09 includes amendments that further enhance income tax disclosures, primarily through standardization and disaggregation of rate reconciliation categories and income taxes paid by jurisdiction. ASU 2023-09 is effective for annual periods beginning after December 15, 2024, on either a prospective or retrospective basis. Early adoption is permitted. The Company is currently evaluating the impact of ASU 2023-09 on its consolidated financial statements and related disclosures.

SEC Final Rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors

In March 2024, the SEC issued the final rule under SEC Release No. 33-11275 and 34-99678, “The Enhancement and Standardization of Climate-Related Disclosures for Investors,” requiring public companies to provide certain climate-related information in their registration statements and annual reports. The final rules will require information about a company’s climate-related risks that have materially impacted or are reasonably likely to have a material impact on its business strategy, results of operations, or financial condition, and the actual and potential material impacts of any identified climate-related risks on the company’s strategy, business model and outlook, as well as relating to assessment, management, oversight and mitigation of such material risks, material climate-related targets and goals, and material greenhouse gas emissions. Additionally, certain disclosures related to severe weather events and other natural conditions will be required in the audited financial statements. The first phase of the final rule is effective for fiscal years beginning in 2025. Disclosure for prior periods is only required if it was previously disclosed in an SEC filing. On April 4, 2024, the SEC voluntarily stayed implementation of the final rule to facilitate the orderly judicial resolution of pending legal challenges to the rule. We are currently evaluating the impact on our disclosures of adopting this new pronouncement.

Supplier Finance Program Obligations (Subtopic 405-50): Disclosure of Supplier Financing Program Obligations

In September 2022, the FASB issued ASU No. 2022-04, requiring enhanced disclosures related to supplier financing programs. The ASU requires disclosure of the key terms of the program and a rollforward of the related obligation during the annual period, including the amount of obligations confirmed and obligations subsequently paid. The Company adopted this ASU as of July 1, 2023, other than the roll-forward disclosure requirement, which the Company will adopt in fiscal 2025. The adoption did not have a material impact on the Company's financial statements and related disclosures.

Note 3. Coherent Acquisition

On July 1, 2022 (the “Closing Date”), the Company completed its acquisition of Coherent, Inc. (the “Merger”), a global provider of lasers and laser-based technology for scientific, commercial, and industrial customers, in a combined cash and stock transaction in accordance with the Agreement and Plan of Merger dated March 25, 2021 (the “Merger Agreement”). Pursuant to the terms of the Merger Agreement, and subject to the conditions set forth therein, each share of common stock of Coherent, Inc., par value $0.01 per share (the “Coherent, Inc. Common Stock”), issued and outstanding immediately prior to July 1, 2022, was canceled and extinguished and automatically converted into the right to receive $220.00 in cash and 0.91 of a share of Coherent’s common stock, no par value (“Coherent Common Stock”).

Following the completion of the Coherent, Inc. acquisition, the Company announced a new brand identity, including a corporate name change to Coherent Corp. (NYSE: COHR) on September 8, 2022.

On the Closing Date, the Company entered into a Credit Agreement (the "Credit Agreement") by and among the Company, the lenders, and other parties thereto, and JP Morgan Chase Bank, N.A., as administrative agent and collateral agent, which provides for senior secured financing of $4 billion, consisting of a new term loan A credit facility (the "Term A Facility") in an aggregate principal amount of $850 million a new term loan B credit facility (the "Term B Facility") (and, together with the Term A Facility, the "Term Facilities") in an aggregate principal amount of $3 billion, and a new revolving credit facility (the "Revolving Credit Facility") in an aggregate available amount of $350 million, including a letter of credit sub-facility of up to $50 million. For further information on the credit facility refer to Note 8. Debt.

In order to complete the funding of the Merger, we had a net cash outflow of $2.1 billion on July 1, 2022. We recorded $94 million of acquisition related costs in the year ended June 30, 2023 representing professional and other direct acquisition costs. These costs are recorded within SG&A expense in our Consolidated Statement of Earnings (Loss). Approximately 23 million shares of Coherent Common Stock in the aggregate were issued in conjunction with the closing of the Merger. Total Merger consideration was $7.1 billion, including replacement equity awards attributable to pre-combination service for certain Coherent, Inc. restricted stock units.

The total fair value of consideration paid in connection with the acquisition of Coherent, Inc. consisted of the following (in $000):

	Shares	Per Share	Total Consideration
Cash paid for merger consideration	—	—	$ 5,460,808
Shares of COHR common stock issued to Coherent, Inc. stockholders	22,587,885	$49.83	1,125,554
Converted Coherent, Inc. RSUs attributable to pre-combination service	—	—	82,037
Payment of Coherent, Inc. debt	—	—	364,544
Payment of Coherent, Inc. transaction expenses	—	—	62,840
			$ 7,095,783

The purchase price allocation set forth herein is final. We allocated the fair value of the purchase price consideration to the tangible assets, liabilities, and intangible assets acquired, generally based on estimated fair values. The excess purchase price over those fair values is recorded as goodwill. Our valuation assumptions of acquired assets and assumed liabilities require estimates, especially with respect to intangible assets, inventories, property, plant & equipment and deferred income taxes. In determining the fair value of intangible assets acquired, we must make assumptions about the future performance of the acquired business, including among other things, the forecasted revenue growth attributable to the asset group and projected operating expenses inclusive of expected synergies, future cost savings, and other benefits expected to be achieved by combining the Company and Coherent, Inc. Our intangible assets are comprised of trade names and trademarks, customer relationships, developed technology and backlog. We utilized widely accepted income-based, market-based, and cost-based valuation approaches to perform the purchase price allocation. The estimated fair value of the customer relationships and backlog are determined using the multi-period excess earnings method and the estimated fair value of the trade names and trademarks and developed technology are determined using the relief from royalty method. Both methods require forward looking estimates that are discounted to determine the fair value of the intangible asset using a risk-adjusted discount rate that is reflective of the level of risk associated with future estimates associated with the asset group that could be affected by future economic and market conditions.

Our final allocation of the purchase price of Coherent, Inc., based on the estimated fair value of the assets acquired and liabilities assumed as of the Closing Date, is as follows (in $000):

	Final Purchase Price Allocation, As Adjusted
Assets	
Current Assets	
Cash, cash equivalents, and restricted cash	$ 393,324
Accounts receivable	270,928
Inventories (i)	562,884
Prepaid and refundable income taxes	4,832
Prepaid and other current assets	37,805
Total Current Assets	1,269,773
Property, plant & equipment, net (ii)	440,932
Deferred income taxes	236
Other assets	106,388
Other intangible assets, net (iii)	3,505,000
Goodwill	3,174,984
Total Assets	$ 8,497,313
Liabilities	
Current Liabilities	
Current portion of long-term debt	$ 4,504
Accounts payable	116,754
Accrued compensation and benefits	58,631
Operating lease current liabilities	13,002
Accrued income taxes payable	25,052
Other accrued liabilities	138,924
Total Current Liabilities	356,867
Long-term debt	22,991
Deferred income taxes	877,598
Operating lease liabilities	43,313
Other liabilities	100,761
Total Liabilities	$ 1,401,530
Final aggregate acquisition consideration	$ 7,095,783

(i) The Consolidated Balance Sheet has been adjusted to record Coherent Inc.'s inventories at a fair value of approximately $563 million. The Consolidated Statement of Earnings (Loss) for the year ended June 30, 2023 includes cost of goods sold of approximately $158 million related to the increased basis in the fair value compared to the carrying value. The costs were amortized over the expected period during which the acquired inventory was sold and thus did not affect the Consolidated Statements of Earnings (Loss) beyond twelve months after the Closing Date.

(ii) The Consolidated Balance Sheet has been adjusted to record Coherent Inc.'s property, plant and equipment (consisting of land, buildings and improvements, equipment, furniture and fixtures, and leasehold improvements) at a fair value of approximately $441 million. The Consolidated Statements of Earnings (Loss) have been adjusted to recognize additional depreciation expense related to the increased basis. The additional depreciation expense is computed with the assumption that the various categories of assets will be depreciated over their remaining useful lives on a straight-line basis.

(iii) Identifiable intangible assets consist of the following and are being amortized over their estimated useful lives in the Consolidated Statements of Earnings (Loss) (in $000):

	Fair Value	Estimated Useful Life
Trade names and trademarks	$ 430,000	N/A
Customer relationships	$ 1,830,000	15.0 years
Developed technology	$ 1,157,500	13.5 years
Backlog	$ 87,500	1.0 year
Intangible assets acquired	$ 3,505,000	

Operating results, including goodwill and intangibles, of Coherent, Inc. are reflected in the Company's consolidated financial statements from the Closing Date, within the Lasers segment. Revenues and net loss for the Lasers segment for the year ended June 30, 2023 were $1,469 million and $412 million, respectively. Goodwill in the amount of $3.2 billion arising from the acquisition is attributed to the expected synergies, including future cost savings, and other benefits expected to be generated by combining Coherent and Coherent, Inc. Substantially all of the goodwill recognized is not expected to be deductible for tax purposes.

Supplemental Pro Forma Information

The supplemental pro forma financial information presented below is for illustrative purposes only and is not necessarily indicative of the financial position or results of operations that would have been realized if the acquisition had been completed on the date indicated, does not reflect synergies that might have been achieved, nor is it indicative of future operating results or financial position. The pro forma adjustments are based upon currently available information and certain assumptions that we believe are reasonable under the circumstances.

The following supplemental pro forma information presents the combined results of operations for the years ended June 30, 2023 and June 30, 2022, as if Coherent, Inc. had been acquired as of July 1, 2021. The supplemental pro forma information includes adjustments to amortization and depreciation for acquired intangible assets, property, plant and equipment, adjustments to share-based compensation expense, fair value adjustments on the inventories acquired, transaction costs, interest expense and amortization of debt issuance costs related to the Senior Credit Facilities (as defined in Note 8. Debt).

The unaudited supplemental pro forma financial information for the periods presented is as follows (in $000):

	Year Ended June 30, 2023	Year Ended June 30, 2022
Revenue	$ 5,160,100	$ 4,837,103
Net Earnings (Loss)	105,849	(289,615)

Note 4. Revenue from Contracts with Customers

The following table summarizes disaggregated revenue by market ($000):

	Year Ended June 30, 2024			
	Networking	Materials	Lasers	Total
Industrial	$ 63,905	$ 546,003	$ 1,070,268	$ 1,680,176
Communications	2,192,286	81,475	—	2,273,761
Electronics	6,655	349,250	—	355,905
Instrumentation	32,883	39,845	325,118	397,846
Total Revenues	$ 2,295,729	$ 1,016,573	$ 1,395,386	$ 4,707,688

	Year Ended June 30, 2023			
	Networking	Materials	Lasers	Total
Industrial	$ 70,076	$ 603,664	$ 1,087,881	$ 1,761,621
Communications	2,219,677	73,703	—	2,293,380
Electronics	11,488	614,151	—	625,639
Instrumentation	39,689	58,240	381,531	479,460
Total Revenues	$ 2,340,930	$ 1,349,758	$ 1,469,412	$ 5,160,100

	Year Ended June 30, 2022			
	Networking	Materials	Lasers	Total
Industrial	$ 84,032	$ 662,731	$ —	$ 746,763
Communications	2,064,424	90,406	—	2,154,830
Electronics	12,218	298,156	—	310,374
Instrumentation	36,575	68,074	—	104,649
Total Revenues	$ 2,197,249	$ 1,119,367	$ —	$ 3,316,616

Contract Liabilities

Contract liabilities generally relate to payments received in advance of performance under customer contracts. Payments received from customers are based on invoices or billing schedules as established in contracts with customers. Contract liabilities are recognized as revenue when performance obligations have been satisfied. During the year ended June 30, 2024, we recognized revenue of $100 million related to customer payments that were included in the Consolidated Balance Sheet as of June 30, 2023. As of June 30, 2024 and June 30, 2023, we had $76 million and $148 million, respectively, of contract liabilities recorded in the Consolidated Balance Sheets. As of June 30, 2024, $62 million of deferred revenue is included in other accrued liabilities, and $13 million is included within other liabilities on the Consolidated Balance Sheet. As of June 30, 2023, $104 million of deferred revenue is included other accrued liabilities, and $43 million is included within other liabilities on the Consolidated Balance Sheet.

Note 5. Inventories

The components of inventories were as follows ($000):

June 30,	2024	2023
Raw materials	$ 429,888	$ 462,436
Work in progress	620,575	549,992
Finished goods	235,941	259,905
Total Inventories	$ 1,286,404	$ 1,272,333

Note 6. Property, Plant & Equipment

Property, plant & equipment consists of the following ($000):

June 30,	2024	2023
Land and land improvements	$ 66,156	$ 69,639
Buildings and improvements	774,991	780,204
Machinery and equipment	2,034,310	1,879,136
Construction in progress	398,884	287,990
Finance lease right-of-use asset	25,000	25,000
	3,299,341	3,041,969
Less accumulated depreciation	(1,482,082)	(1,259,934)
Property, plant, and equipment, net	$ 1,817,259	$ 1,782,035

Included in the table above is a building acquired under a finance lease. As of June 30, 2024 and June 30, 2023, the accumulated depreciation of the finance lease ROU asset was $12 million and $11 million, respectively.

Note 7. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill were as follows ($000):

	Year Ended June 30, 2024			
	Networking	Materials	Lasers	Total
Balance at beginning of period	$ 1,036,204	$ 247,695	$ 3,228,801	$ 4,512,700
Foreign currency translation and other	388	(1,712)	(47,047)	(48,371)
Balance-end of period	$ 1,036,592	$ 245,983	$ 3,181,754	$ 4,464,329

	Year Ended June 30, 2023			
	Networking	Materials	Lasers	Total
Balance-beginning of period	$ 1,013,277	$ 272,482	$ —	$ 1,285,759
Goodwill acquired	—	—	3,174,984	3,174,984
Foreign currency translation and other	22,927	(24,787)	53,817	51,957
Balance-end of period	$ 1,036,204	$ 247,695	$ 3,228,801	$ 4,512,700

The gross carrying amount and accumulated amortization of our intangible assets other than goodwill as of June 30, 2024 and 2023 were as follows ($000):

	June 30, 2024			June 30, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Technology	$ 1,653,289	$ (394,040)	$ 1,259,249	$ 1,661,263	$ (270,786)	$ 1,390,477
Trade Names	438,470	(8,470)	430,000	438,470	(8,279)	430,191
Customer Lists	2,310,550	(498,252)	1,812,298	2,333,360	(339,344)	1,994,016
Backlog and Other	88,792	(87,092)	1,700	88,834	(88,834)	—
Total	$ 4,491,101	$ (987,854)	$ 3,503,247	$ 4,521,927	$ (707,243)	$ 3,814,684

Amortization expense recorded on the intangible assets for the fiscal years ended June 30, 2024, 2023 and 2022 was $288 million, $414 million, and $80 million, respectively. The technology intangible assets are being amortized over a range of 60 to 240 months with a weighted-average remaining life of approximately 155 months, and the amortization is recorded in Cost of goods sold in our Consolidated Statements of Earnings (Loss). The customer lists are being amortized over 72 to 192 months with a weighted-average remaining life of approximately 148 months, and the amortization is recorded in SG&A in our Consolidated Statements of Earnings (Loss).

Amortization expense in the fiscal year ended June 30, 2023 includes a total of $39 million of impairment charges, with $33 million in the Materials segment and $7 million in the Networking segment. $25 million of the impairment charges related to the abandonment of certain purchased technology and customer lists, with $8 million recorded in Cost of goods sold and $18 million recorded in SG&A in our Consolidated Statement of Earnings (Loss). $14 million of impairment charges, recorded in SG&A, related to the abandonment of indefinite-lived trade names primarily due to the fiscal 2023 rebranding of the Company as Coherent Corp. There were no impairment charges included in amortization expense in the fiscal years ended June 30, 2024 and 2022.

In the fourth quarter of fiscal year 2024, we completed our impairment test of our $430 million indefinite-lived Coherent trade name acquired in the Merger, concluding it was not impaired.

The estimated amortization expense for existing intangible assets for each of the five succeeding years is as follows ($000):

Year Ending June 30,		
2025	$	270,150
2026		269,041
2027		267,928
2028		266,238
2029		260,394

Note 8. Debt

The components of debt were as follows ($000):

		June 30, 2024		**June 30, 2023**
Term A Facility, interest at adjusted SOFR, as defined, plus 2.000%	$	775,625	$	818,125
Revolving New Credit Facility, interest at LIBOR, as defined, plus 2.000%		—		—
Debt issuance costs, Term A Facility and Revolving Credit Facility		(13,586)		(18,149)
Term B Facility, interest at adjusted SOFR, as defined, plus 2.50%		2,384,536		2,566,625
Debt issuance costs, Term B Facility		(49,835)		(63,977)
5.00% Senior Notes		990,000		990,000
Debt Issuance costs, Senior Notes		(5,939)		(6,863)
1.3% Term loan		335		1,697
Facility construction loan in Germany		19,082		22,340
Total debt		4,100,218		4,309,798
Current portion of long-term debt		(73,770)		(74,836)
Long-term debt, less current portion	$	4,026,448	$	4,234,962

The required annual principal repayments for all indebtedness for the next five years and thereafter, as of June 30, 2024, is set forth in the following table ($000):

		Year Ending June 30,
2025	$	70,126
2026		85,730
2027		91,042
2028		638,230
2029		27,292
Thereafter		3,257,157
Total	$	4,169,577

Senior Credit Facilities

On July 1, 2022, Coherent entered into a Credit Agreement by and among the Company, as borrower (in such capacity, the "Borrower"), the lenders, and other parties thereto, and JP Morgan Chase Bank, N.A., as administrative agent and collateral agent, which provides for senior secured financing of $4.0 billion, consisting of a term loan A credit facility (the "Term A Facility"), with an aggregate principal amount of $850 million, a term loan B credit facility (the "Term B Facility" and, together with the Term A Facility, the "Term Facilities"), with an aggregate principal amount of $2,800 million, and a revolving credit facility (the "Revolving Credit Facility"), in an aggregate available amount of $350 million, including a letter of credit sub-facility of up to $50 million. On March 31, 2023, Coherent entered into Amendment No. 1 to the Credit Agreement, which replaced the adjusted LIBOR-based rate of interest therein with an adjusted SOFR-based rate of interest. As amended, the Term A Facility and the Revolving Credit Facility each bear interest at an adjusted SOFR rate subject to a 0.10% floor plus a range of 1.75% to 2.50%, based on the Company's total net leverage ratio. The New Term A Facility and the New Revolving Credit Facility bear interest at adjusted SOFR plus 2.00% as of June 30, 2024. On April 2, 2024, Coherent entered into Amendment No. 2 to the Credit Agreement, under which the principal amount of term B loans outstanding under the Credit Agreement (the "Existing Term B Loans") were replaced with an equal amount of new term loans (the "New Term B Loans") having substantially similar terms as the Existing Term B Loans, except with respect to the interest rate applicable to the New Term B Loans and certain other provisions. As further amended, the New Term B Loans bear interest at a SOFR rate (subject to a 0.50% floor) plus 2.50% as of June 30, 2024. The maturity of the New Term Loans and revolving credit facility remains unchanged. Debt extinguishment costs related to the replacement of the Existing Term B Loans of $2 million were expensed in Other expense (income), net in the Consolidated Statement of Earnings (Loss) during the year ended June 30, 2024.

In relation to the Term Facilities, the Company incurred interest expense, including amortization of debt issuance costs and the benefit of the interest rate cap and swap, of $237 million and $239 million in the years ended June 30, 2024 and June 30, 2023, respectively, which is included in Interest expense in the Consolidated Statements of Earnings (Loss). On July 1, 2023, our interest rate cap became effective, which together with our interest rate swap, reduced interest expense by $45 million and $20 million in the years ended June 30, 2024 and June 30, 2023, respectively. Amortization of debt issuance costs related to the Term Facilities for the year ended June 30, 2024 and June 30, 2023 totaled $15 million and $18 million, respectively, and are included in Interest expense in the Consolidated Statements of Earnings (Loss). Debt issuance costs are presented as a reduction to debt within the Long-term debt caption in the Consolidated Balance Sheets.

On the Closing Date, the Borrower and certain of its direct and indirect subsidiaries, provided a guaranty of all obligations of the Borrower and the other loan parties under the Credit Agreement and the other loan documents, secured cash management agreements and secured hedge agreements with the lenders and/or their affiliates (subject to certain exceptions). The Borrower and the other guarantors have also granted a security interest in substantially of their assets to secure such obligations.

Proceeds of the loans borrowed under the Term Facilities on July 1, 2022, together with other financing sources (including the net proceeds from Coherent's offer and sale of its 5.000% Senior Notes due 2029 (the "Senior Notes") and cash on hand) were used to fund the cash portion of the Merger consideration, the repayment of certain indebtedness (including the repayment in full of all amounts outstanding under the Prior Credit Agreement as defined below), and certain fees and expenses in connection with the Merger and otherwise for general corporate purposes.

As of June 30, 2024, the Company was in compliance with all covenants under the Term Facilities.

Prior Senior Credit Facilities

Through June 30, 2022, the Company had senior credit facilities (the "Prior Credit Agreement") with Bank of America, N.A., as Administrative Agent, Swing Line Lender and an L/C Issuer, and the other lenders party thereto. On July 1, 2022, the Company terminated the Prior Credit Agreement and repaid all amounts outstanding thereunder. Debt extinguishment costs related to the termination of the Prior Credit Agreement of $17 million were expensed in Other expense (income), net in the Consolidated Statement of Earnings (Loss) during the year ended June 30, 2023.

Bridge Loan Commitment

Subject to the terms of an amended and restated commitment letter entered into in connection with Coherent entering into the Merger Agreement, the commitment parties thereto committed to provide, in addition to the Term Facilities and the Revolving Credit Facility, a senior unsecured bridge loan facility in an aggregate principal amount of $990 million (the "Bridge Loan Commitment"). As a result of the issuance of the Senior Notes, the Bridge Loan Commitment was terminated. During the year ended June 30, 2023, we incurred expenses of $18 million related to the Bridge Loan Commitment, which is included in Other expense (income) in the Consolidated Statements of Earnings (Loss). During the year ended June 30, 2022, we incurred expenses of $3 million related to the Bridge Loan Commitment, which is included in Interest expense in the Consolidated Statements of Earnings (Loss).

Debt Assumed through Acquisition

We assumed the remaining balances of three term loans with the closing of the Merger. The aggregate principal amount outstanding is $19 million as of June 30, 2024. The terms loans assumed consisted of the following: (i) 1.3% Term Loan due 2024, (ii) 1.0% State of Connecticut Term Loan due 2023 (and repaid prior to June 30, 2023), and (iii) Facility construction loan in Germany due 2030. For the Facility construction loan, on December 21, 2020, Coherent LaserSystems GmbH & Co. KG entered into a loan agreement with Commerzbank for borrowings of up to 24 million Euros, which were drawn down by October 29, 2021, to finance a portion of the construction of a new facility in Germany. The term of the loan is 10 years, and borrowings bear interest at 1.55% per annum. Payments are made quarterly.

5.000% Senior Notes due 2029

On December 10, 2021, the Company issued $990 million aggregate principal amount of Senior Notes pursuant to the indenture, dated as of December 10, 2021 (the “Indenture”), between the Company and U.S. Bank National Association, as trustee. The Senior Notes are guaranteed by each of the Company’s domestic subsidiaries that guarantee its obligations under the Senior Credit Facilities. Interest on the Senior Notes is payable on December 15 and June 15 of each year, commencing on June 15, 2022, at a rate of 5.000% per annum. The Senior Notes will mature on December 15, 2029.

On or after December 15, 2024, the Company may redeem the Senior Notes, in whole at any time or in part from time to time, at the redemption prices set forth in the Indenture, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. In addition, at any time prior to December 15, 2024, the Company may redeem the Senior Notes, at its option, in whole at any time or in part from time to time, at a redemption price equal to 100% of the principal amount of the Senior Notes redeemed, plus a “make-whole” premium set forth in the Indenture, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date. Notwithstanding the foregoing, at any time and from time to time prior to December 15, 2024, the Company may redeem up to 40% of the aggregate principal amount of the Senior Notes using the proceeds of certain equity offerings as set forth in the Indenture, at a redemption price equal to 105.000% of the principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the applicable redemption date.

In relation to the Senior Notes, we incurred interest expense of $50 million for both the years ended June 30, 2024 and June 30, 2023, which is included in Interest expense in the Consolidated Statements of Earnings (Loss).

The Indenture contains customary covenants and events of default, including default relating to among other things, payment default, failure to comply with covenants or agreements contained in the Indenture or the Senior Notes and certain provisions related to bankruptcy events. As of June 30, 2024, the Company was in compliance with all covenants under the Indenture.

Aggregate Availability

The Company had aggregate availability of $346 million under its Revolving Credit Facility as of June 30, 2024.

Weighted Average Interest Rate

The weighted average interest rate of total borrowings was 7% and 6% for the years ended June 30, 2024 and 2023, respectively.

Note 9. Income Taxes

The components of earnings (loss) before income taxes by jurisdiction were as follows ($000):

Year Ended June 30,	2024	2023	2022
U.S. loss	$ (540,048)	$ (450,370)	$ (62,721)
Non-U.S. income	392,401	94,812	344,528
Earnings (loss) before income taxes	$ (147,647)	$ (355,558)	$ 281,807

The components of the income tax expense (benefit) were as follows ($000):

Year Ended June 30,	2024	2023	2022
Current:			
Federal	$ 10,119	$ 5	$ 1,569
State	181	3,867	768
Foreign	103,640	106,850	52,865
Total Current	113,940	110,722	55,202
Deferred:			
Federal	(68,955)	(106,044)	(7,185)
State	(186)	(7,151)	(1,215)
Foreign	(33,682)	(93,627)	246
Total Deferred	(102,823)	(206,822)	(8,154)
Total Income Tax Expense (Benefit)	$ 11,117	$ (96,100)	$ 47,048

Principal items comprising deferred tax assets and liabilities were as follows ($000):

June 30,	2024	2023
Deferred income tax assets		
Inventory capitalization	$ 62,242	$ 60,232
Non-deductible accruals	16,770	18,423
Accrued employee benefits	38,460	40,292
Net-operating loss and credit carryforwards	268,735	234,546
Share-based compensation expense	15,947	16,729
Other	1,346	9,256
Research and development capitalization	128,291	85,473
Deferred revenue	14,839	11,415
Right of use asset	47,712	42,688
Valuation allowances	(154,830)	(97,180)
Total deferred income tax assets	439,512	421,874
Deferred income tax liabilities		
Tax over book accumulated depreciation	(29,065)	(56,742)
Intangible assets	(905,435)	(988,580)
Interest rate swap	(4,104)	(8,522)
Interest rate cap	(11,465)	(10,734)
Tax on unremitted earnings	(61,719)	(51,672)
Outside basis differences	(122,423)	—
Lease liability	(46,198)	(41,426)
Other	(2,511)	(6,757)
Total deferred income tax liabilities	(1,182,920)	(1,164,433)
Net deferred income taxes	$ (743,408)	$ (742,559)

The reconciliation of income tax expense at the statutory U.S. federal rate to the reported income tax expense (benefit) is as follows ($000):

Year Ended June 30,	2024	%	2023	%	2022	%
Taxes at statutory rate	$ (31,006)	21	$ (74,667)	21	$ 59,179	21
Increase (decrease) in taxes resulting from:						
State income taxes-net of federal benefit	(22)	—	(2,548)	1	(339)	—
Taxes on non U.S. earnings	16,601	(11)	191	—	(2,704)	(1)
Valuation allowance	43,866	(30)	3,836	(1)	(1,513)	(1)
U.S. Branch Income	3,226	(2)	2,037	(1)	1,230	1
Noncontrolling interest	1,002	(1)	—	—	—	—
Research and manufacturing incentive deductions and credits	(41,387)	28	(29,416)	8	(24,341)	(9)
Stock compensation	13,294	(9)	18,661	(5)	2,095	1
GILTI and FDII	(629)	—	(7,195)	2	4,866	2
Other	6,172	(4)	(6,999)	2	8,575	3
	$ 11,117	(8)	$ (96,100)	27	$ 47,048	17

The Company is partially permanently reinvested and will repatriate earnings for all non-U.S. subsidiaries with cash in excess of working capital needs. Such distributions could potentially be subject to U.S. state tax in certain states and foreign withholding taxes. Foreign currency gains (losses) related to the translation of previously taxed earnings from functional currency to U.S. dollars could also be subject to U.S. tax when distributed. The Company has estimated the associated withholding tax to be $62 million.

Additionally, the Company made a final accounting policy election to treat taxes due from future inclusions in U.S. taxable income related to global intangible low tax income (“GILTI”) as a current period expense when incurred.

During the fiscal years ended June 30, 2024, 2023, and 2022, cash paid by the Company for income taxes was $97 million, $90 million, and $50 million, respectively.

Our foreign subsidiaries in various tax jurisdictions operate under tax holiday arrangements. The impact of the tax holidays on our effective rate is a reduction in the rate of 5.6%, 2.3% and 1.6% for the fiscal years ended June 30, 2024, 2023 and 2022, respectively, and the impact of the tax holidays on diluted earnings per share is $0.05, $0.05, and $0.04 for the fiscal years ended June 30, 2024, 2023, and 2022, respectively. The tax holiday related to Coherent Malaysia Sdn. Bhd will end during the fiscal year ended June 30, 2026 for certain business lines, the tax holiday related to certain II-VI Laser Enterprise Philippines, Inc.'s business lines will end during the fiscal year ended June 30, 2026, the tax holiday related to certain II-VI Vietnam Co., Ltd business lines will end during the fiscal year ended June 30, 2024, and the tax holiday related to certain Coherent Singapore PTE Ltd business lines will end during the fiscal year ended June 30, 2027.

The Company has the following gross operating loss carryforwards and tax credit carryforwards as of June 30, 2024 ($000):

Type	Amount		Expiration Date
Tax credit carryforwards:			
Federal research and development credits	$	138,723	June 2029-June 2044
Foreign tax credits		—	
State tax credits		21,420	June 2025-June 2039
State tax credits (indefinite)		79,179	Indefinite
Operating loss carryforwards:			
Loss carryforwards - federal	$	36,014	June 2025-June 2036
Loss carryforwards - federal (indefinite)		1,968	Indefinite
Loss carryforwards - state		324,702	June 2025-June 2044
Loss carryforwards - state (indefinite)		36,719	Indefinite
Loss carryforwards - foreign		70,666	June 2025-June 2033
Loss carryforwards - foreign (indefinite)		152,336	Indefinite

The Company has recorded a valuation allowance against the majority of the foreign and state loss and credit carryforwards, certain U.S. credit carryforwards and the majority of state credit carryfowards. The Company's U.S. federal loss carryforwards, federal research and development credit carryforwards, foreign tax credits, and certain state tax credits resulting from the Company's acquisitions are subject to various annual limitations under Section 382 of the U.S. Internal Revenue Code.

Changes in the liability for unrecognized tax benefits for the fiscal years ended June 30, 2024, 2023 and 2022 were as follows ($000):

Year Ended June 30,		2024		2023		2022
Beginning balance	$	115,180	$	37,411	$	38,025
Increases in current year tax positions		5,168		110		1,803
Acquired business		—		86,077		—
Settlements		(2,970)		—		—
Expiration of statute of limitations		(681)		(8,418)		(2,417)
Ending balance	$	116,697	$	115,180	$	37,411

The Company classifies all estimated and actual interest and penalties as income tax expense. During fiscal years 2024, 2023 and 2022, there was $2.3 million, $0.3 million and $0.4 million of interest and penalties within income tax expense, respectively. The Company had $7 million, $6 million and $3 million of interest and penalties accrued at June 30, 2024, 2023 and 2022, respectively. The Company has classified the uncertain tax positions as non-current income tax liabilities, as the amounts are not expected to be paid within one year. The majority of the liability can be offset by credit carryforwards and would not impact cash taxes. Including tax positions for which the Company determined that the tax position would not meet the more likely than not recognition threshold upon examination by the tax authorities based upon the technical merits of the position, the total estimated unrecognized tax benefit that, if recognized, would affect our effective tax rate, was approximately $19 million, $92 million and $25 million at June 30, 2024, 2023 and 2022, respectively. For the year ended June 30, 2024, due to the U.S. valuation allowance, a large portion of our unrecognized tax benefit will no longer impact the tax rate if recognized. The Company expects a decrease of $2 million of unrecognized tax benefits during the next 12 months due to the expiration of statutes of limitation.

Fiscal years 2018 and 2020 to 2023 remain open to examination by the Internal Revenue Service, fiscal years 2019 to 2023 remain open to examination by certain state jurisdictions, and fiscal years 2012 to 2023 remain open to examination by certain foreign taxing jurisdictions. The Company is currently under examination for certain subsidiary companies in Vietnam for the years ended June 30, 2017 through September 30, 2021; Singapore for the year ended September 30, 2020; Korea for the year ended September 30, 2021; Spain for the years ended September 30, 2020 through September 30, 2022; and Germany for the years ended June 30, 2012 through September 30, 2020. The Company believes its income tax reserves for these tax matters are adequate.

Note 10. Equity and Redeemable Preferred Stock

As of June 30, 2024, the Company's amended and restated articles of incorporation authorize our board of directors, without the approval of our shareholders, to issue 5 million shares of our preferred stock. As of June 30, 2024, 2.3 million shares of mandatory preferred convertible shares have been authorized, none are outstanding; 75,000 shares of Series B-1 convertible preferred stock, no par value, have been issued and are outstanding; and 140,000 shares of Series B-2 convertible preferred stock, no par value, have been issued and are outstanding.

Mandatory Convertible Preferred Stock

In July 2020, we issued 2.3 million shares of Mandatory Convertible Preferred Stock.

All outstanding shares of Mandatory Convertible Preferred Stock were converted to 10,240,290 shares of Company Common Stock on July 3, 2023, at a conversion ratio of 4.4523, and no shares of Mandatory Convertible Preferred Stock are currently issued and outstanding.

Preferred dividends are presented as a reduction to Retained earnings on the Consolidated Balance Sheets.

The following table presents dividends per share and dividends recognized:

	Year Ended June 30, 2024	Year Ended June 30, 2023
Dividends per share	$ —	$ 12
Series A Mandatory Convertible Preferred Stock dividends ($000)	—	27,600

Series B-1 Convertible Preferred Stock

In connection with entering into the Merger Agreement, Coherent entered into an Amended and Restated Investment Agreement, dated as of March 30, 2021 (the "Investment Agreement"), with BCPE Watson (DE) SPV, LP, an affiliate of Bain Capital Private Equity, LP (the "Investor"). Pursuant to the terms of the Investment Agreement, on March 31, 2021, Coherent issued, sold, and delivered to the Investor 75,000 shares of a new Series B-1 Convertible Preferred Stock of the Company, no par value per share ("Series B-1 Preferred Stock"), for $10,000 per share (the "Equity Per Share Price"), resulting in an aggregate purchase price of $750 million.

Following our provision of notice to the Investor of its election to offer the Upsize Shares, the Investor informed the Company on June 8, 2021, of its agreement to purchase the Upsize Shares from the Company immediately prior to the closing of the Coherent acquisition, increasing the Investor's total equity commitment to Coherent pursuant to the Investment Agreement to $2.15 billion.

On July 1, 2022, the Company issued and sold 140,000 shares of Coherent Series B-2 Convertible Preferred Stock, for $10,000 per share and an aggregate purchase price of $1.4 billion.

The shares of Series B-1 Preferred Stock accrue dividends at 5.00% per annum, subject to increase if Coherent defaults on payment obligations with respect to the Series B-1 Preferred Stock, not to exceed 14% per annum. Until the fourth anniversary of March 31, 2021 (the "Initial Issue Date"), dividends are payable solely in-kind. After the fourth anniversary of the Initial Issue Date, dividends are payable on the applicable series, at the Company's option, in cash, in-kind, or as a combination of both.

The shares of Series B-1 Preferred Stock are convertible into shares of Coherent Common Stock as follows:

- at the election of the holder, at a conversion price of $85 per share (as it may be adjusted from time to time, the "Conversion Price"), upon the delivery by Coherent to the holders of the Series B-1 Preferred Stock of an offer to repurchase the Series B-1 Preferred Stock upon the occurrence of a Fundamental Change (as defined in the Statement with Respect to Shares establishing the Series B Preferred Stock as defined below); and

- at the election of the Company, any time following March 31, 2024, at the then-applicable Conversion Price if the volume-weighted average price of Coherent Common Stock exceeds 150% of the then-applicable Conversion Price for 20 trading days out of any 30 consecutive trading days.

The issued shares of Series B-1 Preferred Stock currently have voting rights, voting as one class with the Coherent Common Stock and the Series B-2 Preferred Stock (as defined below), on an as-converted basis, subject to limited exceptions.

On or at any time after March 31, 2031:

- each holder has the right to require the Company to redeem all of their Series B-1 Preferred Stock, for cash, at a redemption price per share equal to the sum of the Stated Value (as defined in the Statement with Respect to Shares establishing the Series B Preferred Stock) for such shares plus an amount equal to all accrued or declared and unpaid dividends on such shares that had not previously been added to the Stated Value (such price the “Redemption Price,” and such right the “Put Right”), and

- the Company has the right to redeem, in whole or in part, on a pro rata basis from all holders based on the aggregate number of shares of Series B-1 Preferred Stock outstanding, for cash, at the Redemption Price.

In connection with any Fundamental Change (as defined in the Statement with Respect to Shares establishing the Series B Preferred Stock), and subject to the procedures set forth in the Statement with Respect to Shares establishing the Series B Preferred Stock, the Company must, or will cause the survivor of a Fundamental Change to, make an offer to repurchase, at the option and election of the holder thereof, each share of Series B-1 Preferred Stock then outstanding at a purchase price per share in cash equal to (i) the Stated Value for such shares plus an amount equal to all accrued or declared and unpaid dividends on such shares that had not previously been added to the Stated Value as of the date of repurchase plus (ii) if prior to March 31, 2026, the aggregate amount of all dividends that would have been paid (subject to certain exceptions), from the date of repurchase through March 31, 2026.

If the Company defaults on a payment obligation with respect to the Series B-1 Preferred Stock, and such default is not cured within 30 days, the dividend rate will increase to 8% per annum and will be increased by an additional 2% per annum each quarter the Company remains in default, not to exceed 14% per annum.

The Series B-1 Preferred Stock is redeemable for cash outside of the control of the Company upon the exercise of the Put Right, and upon a Fundamental Change, and is therefore classified as mezzanine equity.

The Series B-1 Preferred Stock is initially measured at fair value less issuance costs, accreted to its redemption value over a 10-year period (using the effective interest method) with such accretion accounted for as deemed dividends and reductions to Net Earnings (Loss) available to Common Shareholders.

We recognized $123 million and $117 million of preferred stock dividends during the fiscal years ended June 30, 2024, and June 30, 2023, respectively, which were presented as a reduction to retained earnings on the Consolidated Balance Sheet as of June 30, 2024.

The following table presents dividends per share and dividends recognized for the years ended June 30, 2024, and June 30, 2023:

	Year Ended June 30, 2024	Year Ended June 30, 2023
Dividends per share	$ 574	$ 542
Dividends ($000)	117,894	111,785
Deemed dividends ($000)	5,463	4,827

Note 11. Earnings Per Share

Basic earnings (loss) per common share is computed by dividing net earnings (loss) available to the common shareholders by the weighted-average number of shares of common stock outstanding during the period.

Diluted earnings (loss) per common share is computed by dividing the diluted earnings (loss) available to the common shareholders by the weighted-average number of shares of common stock and potentially dilutive shares of common stock outstanding during the period. The dilutive effect of equity awards is calculated based on the average stock price for each fiscal period, using the treasury stock method. The shares of Coherent Common Stock issuable upon conversion of the Series B Convertible Preferred Stock are calculated under the If-Converted method. For the years ended June 30, 2024 and June 30, 2023, diluted earnings (loss) per share excluded the potentially dilutive effect of the performance and restricted shares, as well as the shares of Coherent Common Stock issuable upon conversion of the Series B Convertible Preferred Stock as their effects were anti-dilutive. For the fiscal year ended June 30, 2022, diluted shares outstanding include the dilutive effect of the potential shares of our common stock issuable from stock options, performance and restricted shares and the dilutive effect of the potential shares of our common stock issuable upon conversion of outstanding convertible debt.

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings (loss) per share computations for the periods presented ($000, except per share):

Year Ended June 30,	**2024**	**2023**	**2022**
Numerator			
Net earnings (loss) attributable to Coherent Corp.	$ (156,154)	$ (259,458)	$ 234,759
Deduct Series A preferred stock dividends	—	(27,600)	(27,600)
Deduct Series B dividends and deemed dividends	(123,357)	(116,612)	(40,625)
Basic earnings (loss) available to the common shareholders	$ (279,511)	$ (403,670)	$ 166,534
Effect of dilutive securities:			
Add back interest on Convertible Notes (net of tax)	$ —	$ —	$ 2,229
Diluted earnings (loss) available to the common shareholders	$ (279,511)	$ (403,670)	$ 168,763
Denominator			
Weighted average shares	151,642	137,578	106,189
Effect of dilutive securities			
Common stock equivalents	—	—	3,012
Convertible Notes	—	—	7,312
Diluted weighted average common shares	151,642	137,578	116,513
Basic earnings (loss) per common share	$ (1.84)	$ (2.93)	$ 1.57
Diluted earnings (loss) per common share	$ (1.84)	$ (2.93)	$ 1.45

The following table presents potential shares of common stock excluded from the calculation of diluted net earnings (loss) per share, as their effect would have been antidilutive (in thousands of shares):

Year Ended June 30,	**2024**	**2023**	**2022**
Series A Mandatory Convertible Preferred Stock	—	10,423	8,915
Series B Convertible Preferred Stock	27,691	26,349	9,162
Common stock equivalents	2,940	2,271	9,611
Total anti-dilutive shares	30,631	39,043	27,688

Note 12. Noncontrolling Interests

On December 4, 2023, Silicon Carbide LLC ("Silicon Carbide"), one of the Company's subsidiaries, completed (i) the sale of 16,666,667 Class A Common Units to Denso Corporation ("Denso") for $500,000,000 pursuant to an Investment Agreement, dated as of October 10, 2023, by and between Silicon Carbide and Denso and (ii) the sale of 16,666,667 Class A Common Units to Mitsubishi Electric Corporation ("MELCO") for $500,000,000 pursuant to an Investment Agreement, dated as of October 10, 2023, by and between Silicon Carbide and MELCO (collectively, the "Equity Investments").

As a consequence of the Equity Investments, the Company's ownership interest in the Class A Common Units of Silicon Carbide LLC was reduced to approximately 75%. Denso and MELCO each, individually, own approximately 12.5% of the Class A Common Units of Silicon Carbide LLC.

The Equity Investments in Silicon Carbide will enable Coherent to increase its available free cash flow to provide greater financial and operational flexibility to execute its capital allocation priorities, as the aggregate $1 billion investment, net of transaction costs, will be used to fund future capital expansion of Silicon Carbide.

The following table presents the activity in noncontrolling interests in Silicon Carbide ($000):

Year Ended June 30,	2024
Beginning balance	$ —
Sale of shares to noncontrolling interests	373,573
Share of foreign currency translation adjustments	429
Net loss	(2,610)
Ending balance	$ 371,392

Note 13. Leases

The determination of whether an arrangement is, or contains, a lease is performed at the inception of the arrangement. Classification and initial measurement of the right-of-use asset and lease liability are determined at the lease commencement date. The Company elected the short-term lease measurement and recognition exemption; therefore, leases with an initial term of 12 months or less are not recorded on the balance sheet.

Finance leases are generally those that allow us to substantially utilize or pay for the entire asset over its estimated useful life. Finance lease assets are recorded in Property, plant and equipment, net, and finance lease liabilities within Other accrued liabilities and Other liabilities on our Consolidated Balance Sheets. Finance lease assets are amortized in operating expenses on a straight-line basis over the shorter of the estimated useful lives of the assets or the lease term, with the interest component for lease liabilities included in interest expense and recognized using the effective interest method over the lease term.

Operating leases are recorded in Other assets and Operating lease liabilities, current and non-current on our Consolidated Balance Sheets. Operating lease assets are amortized on a straight-line basis in operating expenses over the lease term.

Our lease liabilities are recognized based on the present value of the remaining fixed lease payments, over the lease term, using a discount rate of similarly secured borrowings available to the Company. For the purpose of lease liability measurement, we consider only payments that are fixed and determinable at the time of commencement. Any variable payments that depend on an index or rate are expensed as incurred. We account for non-lease components, such as common area maintenance, as a component of the lease, and include it in the initial measurement of our lease assets and corresponding liabilities. Our lease terms and conditions may include options to extend or terminate. An option is recognized when it is reasonably certain that we will exercise that option.

Our lease assets also include any lease payments made, and exclude any lease incentives received prior to commencement. Our lease assets are tested for impairment in the same manner as long-lived assets used in operations.

The following table presents lease costs, which include leases for arrangements with an initial term of more than 12 months, lease term, and discount rates ($000):

Year Ended June 30,	2024	2023	2022
Finance Lease Cost			
Amortization of right-of-use assets	$ 1,667	$ 1,667	$ 1,671
Interest on lease liabilities	1,040	1,124	1,200
Total finance lease cost	2,707	2,791	2,871
Operating lease cost	52,909	53,127	36,716
Sublease income	—	—	507
Total lease cost	$ 55,616	$ 55,918	$ 39,080
Cash Paid for Amounts Included in the Measurement of Lease Liabilities			
Operating cash flows from finance leases	1,040	1,124	1,200
Operating cash flows from operating leases	50,672	50,503	35,481
Financing cash flows from finance leases	1,584	1,430	1,290
Assets Obtained in Exchange for Lease Liabilities			
Right-of-use assets obtained in acquisitions	—	56,315	—
Right-of-use assets obtained in exchange for new operating lease liabilities	64,385	27,720	18,161
Total assets obtained in exchange for new operating lease liabilities	64,385	84,035	18,161
Weighted-Average Remaining Lease Term (in Years)			
Finance leases	7.5	8.5	9.5
Operating leases	6.6	6.9	6.6
Weighted-Average Discount Rate			
Finance leases	5.6 %	5.6 %	5.6 %
Operating leases	6.8 %	5.5 %	5.7 %

The following table presents future minimum lease payments, which includes leases for arrangements with an initial term of more than 12 months ($000):

Future Years	Operating Leases	Finance Leases	Total
Year 1	$ 52,461	$ 2,697	$ 55,158
Year 2	44,876	2,771	47,647
Year 3	34,923	2,847	37,770
Year 4	26,469	2,925	29,394
Year 5	23,833	3,006	26,839
Thereafter	75,033	7,757	82,790
Total minimum lease payments	$ 257,595	$ 22,003	$ 279,598
Less: amounts representing interest	54,660	4,120	58,780
Present value of total lease liabilities	$ 202,935	$ 17,883	$ 220,818

Note 14. Share-Based Compensation

The Company's Board of Directors amended the Coherent Corp. 2018 Omnibus Incentive Plan, which originally was approved by the Company's shareholders at the Annual Meeting in November 2018, as the Coherent Corp. Omnibus Incentive Plan (as amended and restated, the "Plan"). The Plan was approved at the Annual Meeting in November 2023. The Plan provides for the grant of stock options, stock appreciation rights, restricted shares, restricted share units, deferred shares, performance shares and performance share units to employees, officers and directors of the Company. The maximum number of shares of Coherent Common Stock authorized for issuance under the Plan is limited to 13,450,000 shares of Coherent Common Stock, not including any remaining shares forfeited under the predecessor plans that may be rolled into the Plan. Certain awards under the Plan have certain vesting provisions predicated upon the death, retirement or disability of the grantee.

On the Closing Date, the Company assumed the Coherent, Inc. Equity Incentive Plan ("Coherent, Inc. Plan") and the Coherent, Inc. unvested restricted stock units ("Converted RSUs") that are generally subject to the same terms and conditions that applied to the Converted RSUs immediately prior to the Closing Date. After the Closing Date, the Company granted restricted stock units under the Coherent, Inc. Plan through August 28, 2023. The Coherent, Inc. Plan was terminated upon adoption of the Plan in November 2023. No additional awards will be granted under the Coherent, Inc. Plan.

As of June 30, 2024, there were approximately 6 million shares available to be issued under the Plan, including forfeited shares from predecessor plans.

On June 3, 2024, the Board of Directors granted 147,214 restricted stock units vesting over three years from date of grant and 694,007 performance stock units vesting over the approximate three-year period ending June 30, 2027, to the new CEO. The grants were non-Plan "employment inducement awards" as contemplated by the New York Stock Exchange Listing Rule 303A.08 and therefore were not made pursuant to the Plan.

The Company has an Employee Stock Purchase Plan whereby eligible employees may authorize payroll deductions of up to 10%, or such other percentage up to 15% that the Company determines, of their regular base salary to purchase shares at the lower of 85% of the fair market value of the common stock on the date of commencement of the offering or on the last day of the six-month offering period.

We record share-based compensation expense for these awards, which requires the recognition of the grant-date fair value of share-based compensation in net earnings. We recognize the share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period. We account for cash-based stock appreciation rights, cash-based restricted share units and cash-based performance share units as liability awards.

Share-based compensation expense for the fiscal years ended June 30, 2024, 2023 and 2022 is as follows ($000):

Year Ended June 30,	2024	2023	2022
Stock Options and Cash-Based Stock Appreciation Rights	$ 1,149	$ 2,602	$ 3,218
Restricted Share Awards and Cash-Based Restricted Share Unit Awards	92,634	124,212	56,365
Performance Share Awards and Cash-Based Performance Share Unit Awards	21,912	14,998	10,077
Employee Stock Purchase Plan	11,200	7,819	3,443
	$ 126,895	$ 149,631	$ 73,103

Stock Options and Cash-Based Stock Appreciation Rights

We utilize the Black-Scholes valuation model for estimating the fair value of stock options and cash-based stock appreciation rights. During the fiscal years ended June 30, 2024, June 30, 2023 and June 30, 2022, no stock options were issued.

Stock option and cash-based stock appreciation rights activity during the fiscal year ended June 30, 2024 was as follows:

	Stock Options		Cash-Based Stock Appreciation Rights	
	Number of Shares	Weighted Average Exercise Price	Number of Rights	Weighted Average Exercise Price
Outstanding - June 30, 2023	2,186,944	$ 30.15	102,890	$ 35.12
Exercised	(685,615)	$ 24.64	(53,932)	$ 34.90
Forfeited and Expired	(10,684)	$ 39.74	(2,087)	$ 32.70
Outstanding - June 30, 2024	1,490,645	$ 32.62	46,871	$ 35.48
Exercisable - June 30, 2024	1,490,645	$ 32.62	46,871	$ 35.48

As of June 30, 2024, 2023 and 2022, the aggregate intrinsic value of stock options and cash-based stock appreciation rights outstanding and exercisable was $61 million, $44 million and $48 million, respectively. Aggregate intrinsic value represents the total pretax intrinsic value (the difference between our closing stock price on the last trading day of the year ended June 30, and the option's exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on June 30, 2024. This amount varies based on the fair market value of the Company's stock. The total intrinsic value of stock options and cash-based stock appreciation rights exercised during the fiscal years ended June 30, 2024, 2023, and 2022 was $25 million, $5 million, and $8 million, respectively. As of June 30, 2024, there was no unrecognized compensation cost related to non-vested stock options and cash-based stock appreciation rights.

Outstanding and exercisable stock options at June 30, 2024 were as follows:

	Stock Options and Cash-Based Stock Appreciation Rights Outstanding			Stock Options and Cash-Based Stock Appreciation Rights Exercisable		
Range of Exercise Prices	Number of Shares or Rights	Weighted Average Remaining Contractual Term (Years)	Weighted Average Exercise Price	Number of Shares or Rights	Weighted Average Remaining Contractual Term (Years)	Weighted Average Exercise Price
$13.34 - $18.07	220,107	1.08	$ 17.68	220,107	1.08	$ 17.68
$18.07 - $24.35	294,425	2.08	$ 21.52	294,425	2.08	$ 21.52
$24.35 - $35.39	300,515	3.57	$ 33.94	300,515	3.57	$ 33.94
$35.39 - $36.90	420,798	5.22	$ 36.45	420,798	5.22	$ 36.45
$36.90 - $49.90	301,671	4.05	$ 48.14	301,671	4.05	$ 48.14
	1,537,516	3.47	$ 32.71	1,537,516	3.47	$ 32.71

Restricted Share Awards, Restricted Share Units, and Cash-Based Restricted Share Units

Restricted share awards, restricted share units, and cash-based restricted share units compensation expense was calculated based on the number of shares or units expected to be earned by the grantee multiplied by the stock price at the date of grant (for restricted share awards and restricted share units) or the stock price at the period end date (for cash-based restricted share units), and is being recognized over the vesting period. Generally, the restricted share awards, restricted share units, and cash-based restricted share units have a three-year tranche vesting provision. There were no restricted share awards issued in the fiscal years ending June 30, 2024 and June 30, 2023, and all previous restricted share awards have been amortized in full.

Restricted share unit and cash-based restricted share unit activity during the fiscal year ended June 30, 2024, was as follows:

	Restricted Share Units		Cash-Based Restricted Share Units	
	Number of Units	Weighted Average Grant Date Fair Value	Number of Units	Weighted Average Grant Date Fair Value
Nonvested - June 30, 2023	3,521,954	$ 53.33	5,975	$ 53.12
Granted	2,740,565	$ 39.95	6,876	$ 38.04
Vested	(2,021,002)	$ 50.89	(3,062)	$ 52.02
Forfeited	(173,632)	$ 45.94	(805)	$ 41.45
Nonvested - June 30, 2024	4,067,885	$ 45.84	8,984	$ 43.00

As of June 30, 2024, total unrecognized compensation cost related to non-vested, restricted share units and cash-based restricted share units was $96 million. This cost is expected to be recognized over a weighted-average period of approximately two years. The restricted share unit compensation expense was calculated based on the number of shares expected to be earned, multiplied by the stock price at the date of grant, and is being recognized over the vesting period. The cash-based restricted share unit compensation expense was calculated based on the number of units expected to be earned, multiplied by the stock price at the period-end date, and is being recognized over the vesting period. The total fair value of the restricted share awards, restricted share units, and cash-based restricted share units granted during the years ended June 30, 2024, 2023 and 2022, was $110 million, $102 million and $54 million, respectively. The total fair value of restricted share awards, restricted share units and cash-based restricted share units vested was $74 million, $131 million and $67 million during fiscal years 2024, 2023 and 2022, respectively.

Performance Share Units

The Compensation Committee of the Board of Directors of the Company has granted certain executive officers and employees performance share units under the Plan. As of June 30, 2024, we had outstanding grants covering performance periods ranging from 12 to 36 months. These grants are intended to provide continuing emphasis on specified financial performance goals that the Company considers important contributors to the creation of long-term shareholder value. These grants are payable only if the Company achieves specified levels of financial performance during the performance periods.

For our relative Total Shareholder Return ("TSR") performance-based units, which are based on market performance of our stock as compared to the S&P Composite 1500 – Electronic Equipment, Instruments & Components Index, the compensation cost is recognized over the performance period on a straight-line basis, because the grants vest only at the end of the measurement period, and the probability of actual shares expected to be earned is considered in the grant date valuation. As a result, the expense is not adjusted to reflect the actual shares earned. We estimate the fair value of the TSR performance-based units using the Monte-Carlo simulation model.

The performance share unit compensation expense was calculated based on the number of shares expected to be earned, multiplied by the stock price at the date of grant, and is being recognized over the vesting period.

Performance share unit activity relating to the Plan during the year ended June 30, 2024, was as follows:

	Performance Share Units	
	Number of Units	Weighted Average Grant Date Fair Value
Nonvested - June 30, 2023	882,637	$ 36.11
Granted	1,244,605	$ 90.71
Vested	(86,984)	$ 45.12
Forfeited	(337,517)	$ 44.67
Nonvested - June 30, 2024	1,702,741	$ 73.86

As of June 30, 2024, total unrecognized compensation cost related to non-vested performance share units was $102 million. This cost is expected to be recognized over a weighted-average period of approximately 2.24 years. The total fair value of the performance share units granted during the fiscal years ended June 30, 2024, 2023 and 2022 was $113 million, $27 million and $14 million, respectively. The total fair value of performance share units and cash-based performance share units vested during the fiscal years ended June 30, 2024, 2023 and 2022 was $14 million, $24 million and $11 million, respectively.

Note 15. Segment and Geographic Reporting

Our Chief Executive Officer has been identified as the chief operating decision maker ("CODM") as he utilizes financial information to make decisions about allocating resources and assessing performance for the entire Company, which is used in the decision-making process to assess performance. We determine our reportable business segments based on the way the CODM organizes business segments within the Company for making operating decisions and assessing performance. Effective July 1, 2022, we report our financial results in the following three segments: (i) Networking, (ii) Materials, and (iii) Lasers.

The Networking segment has locations in the United States, Australia, China, Germany, Malaysia, South Korea, Thailand, the Philippines, the United Kingdom, and Vietnam. This segment address all of Coherent's four end markets, namely: communications, industrial, electronics, and instrumentation, with a concentration in the communications market. This segment leverages Coherent's compound semiconductor technology platforms and deep knowledge of end-user applications for our key end markets to deliver differentiated components and subsystems.

The Materials segment has locations in the United States, Belgium, China, Germany, Italy, Japan, Singapore, South Korea, Sweden, Switzerland, Taiwan, the Philippines, the United Kingdom, and Vietnam. This segment address all of Coherent's four end markets, namely: communications, industrial, electronics, and instrumentation, with concentrations in the industrial and electronics markets. The Materials segment is a market leader in engineered materials and optoelectronic devices, such as those based on ZnSe, ZnS, GaAs, InP, GaSb, and SiC.

The Lasers segment has locations in the United States, Finland, Germany, Malaysia, Singapore, South Korea, Spain, Sweden, Switzerland, and the United Kingdom. The Lasers segment's lasers and optics products serve industrial customers in semiconductor capital equipment, display capital equipment, precision manufacturing, and aerospace & defense, as well as instrumentation customers in life sciences and scientific research.

To the extent possible, our corporate expenses are allocated to the segments. The Company's CODM evaluates the performance of its segments based upon reported segment operating income (loss), which is defined as earnings (loss) from operations before income taxes, interest and other income or expense. Unallocated and Other include eliminating inter-segment sales and transfers as well as transaction costs related to the Coherent acquisition, before its close, in the fiscal year ended June 30, 2022.

The following tables summarize selected financial information of our operations by segment ($000):

2024	Networking	Materials	Lasers	Unallocated & Other	Total
Revenues	$ 2,295,729	$ 1,016,573	$ 1,395,386	$ —	$ 4,707,688
Inter-segment revenues	45,767	457,623	5,212	(508,602)	—
Operating income (loss)	178,789	62,876	(145,544)	—	96,121
Interest expense	—	—	—	—	(288,475)
Other income (expense), net	—	—	—	—	44,707
Income taxes	—	—	—	—	(11,117)
Net loss	—	—	—	—	(158,764)
Net loss attributable to Coherent Corp.	—	—	—	—	(156,154)
Depreciation and amortization	161,499	108,979	289,283	—	559,761
Expenditures for property, plant & equipment	90,950	224,482	31,384	—	346,816
Segment assets	3,543,981	3,502,642	7,442,011	—	14,488,634
Goodwill	1,036,592	245,983	3,181,754	—	4,464,329

2023	Networking	Materials	Lasers	Unallocated & Other	Total
Revenues	$ 2,340,930	$ 1,349,758	$ 1,469,412	$ —	$ 5,160,100
Inter-segment revenues	70,120	362,179	1,517	(433,817)	—
Operating income (loss)	222,365	159,581	(419,066)	—	(37,120)
Interest expense	—	—	—	—	(286,872)
Other income (expense), net	—	—	—	—	(31,566)
Income taxes	—	—	—	—	96,100
Net loss attributable to Coherent Corp.	—	—	—	—	(259,458)
Depreciation and amortization	172,339	143,243	366,105	—	681,687
Expenditures for property, plant & equipment	98,192	274,434	63,434	—	436,060
Segment assets	3,316,555	2,561,156	7,833,422	—	13,711,133
Goodwill	1,036,204	247,695	3,228,801	—	4,512,700

2022	Networking	Materials	Lasers	Unallocated & Other	Total
Revenues	$ 2,197,249	$ 1,119,367	$ —	$ —	$ 3,316,616
Inter-segment revenues	93,660	272,580	—	(366,240)	—
Operating income (loss)	231,563	218,601	—	(35,870)	414,294
Interest expense	—	—	—	—	(121,254)
Other income (expense), net	—	—	—	—	(11,233)
Income taxes	—	—	—	—	(47,048)
Net earnings attributable to Coherent Corp.	—	—	—	—	234,759
Depreciation and amortization	172,092	114,687	—	—	286,779
Expenditures for property, plant & equipment	89,616	224,716	—	—	314,332
Segment Assets	4,897,252	2,947,594	—	—	7,844,846
Goodwill	1,013,277	272,482	—	—	1,285,759

Geographic information for revenues by location of the customer's headquarters, were as follows ($000):

	Revenues		
Year Ended June 30,	2024	2023	2022
North America	$ 2,622,569	$ 2,745,891	$ 1,771,385
Europe	714,282	979,911	623,157
China	621,918	577,180	614,393
Japan	340,863	392,479	196,512
Rest of World	408,056	464,639	111,169
Total	$ 4,707,688	$ 5,160,100	$ 3,316,616

Major Customers

We had one major customer who accounted for 10% of consolidated revenue during fiscal 2024. The customer purchased primarily from our Networking segment. We had another major customer who accounted for 10% of consolidated revenue during fiscal 2023. The customer purchased primarily from our Networking segment.

Geographic information for long-lived assets by country, which include property, plant and equipment, net of related depreciation, and certain other long-term assets, were as follows ($000):

June 30,	Long-Lived Assets 2024	Long-Lived Assets 2023
United States	$ 1,226,359	$ 1,069,012
Non-United States		
China	349,195	365,331
Germany	209,593	216,336
United Kingdom	19,153	77,474
Malaysia	87,783	70,424
Switzerland	44,256	47,110
Sweden	44,733	38,981
Korea	17,862	20,869
Vietnam	20,707	17,739
Australia	8,611	8,641
Taiwan	6,705	7,883
Philippines	11,217	7,205
Other	23,166	24,853
Total Non-United States	842,981	902,846
	$ 2,069,340	$ 1,971,858

Note 16. Fair Value of Financial Instruments

The FASB defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous markets for the asset and liability in an orderly transaction between market participants at the measurement date. We estimate fair value of our financial instruments utilizing an established three-level hierarchy in accordance with U.S. GAAP. The hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date as follows:

- Level 1 – Valuation is based upon unadjusted quoted prices for identical assets or liabilities in active markets.
- Level 2 – Valuation is based upon quoted prices for similar assets and liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instruments.
- Level 3 – Valuation is based upon other unobservable inputs that are significant to the fair value measurements.

The classification of fair value measurements within the hierarchy is based upon the lowest level of input that is significant to the measurement.

We entered into an interest rate swap with a notional amount of $1,075 million to limit the exposure to our variable interest rate debt by effectively converting it to a fixed interest rate. We receive payments based on the one-month LIBOR and make payments based on a fixed rate of 1.52%. We receive payments with a floor of 0.00%. The interest rate swap agreement had an effective date of November 24, 2019, with an expiration date of September 24, 2024. The initial notional amount of the interest rate swap decreased to $825 million in June 2022, and will remain at that amount through the expiration date. On March 20, 2023, we amended our $825 million interest rate swap ("Amended Swap"), effective as of February 28, 2023, to replace the current reference rate (LIBOR) with SOFR, to be consistent with Amendment no. 1 to the Credit Agreement. See Note 8. Debt for further information. Under the Amended Swap, we receive payments based on the one-month SOFR and make payments based on a fixed rate of 1.42%. We receive payments with a floor of 0.10%. We designated this instrument as a cash flow hedge, and deemed the hedge relationship effective at inception of the contract and the amended contract.

The fair value of the interest rate swap of $8 million and $37 million is recognized in the Consolidated Balance Sheets within Prepaid and other current assets and Other assets as of June 30, 2024 and June 30, 2023, respectively. Changes in fair value are recorded within Accumulated other comprehensive income (loss) on the Consolidated Balance Sheets and reclassified into the Consolidated Statements of Earnings (Loss) as interest expense in the period in which the underlying transaction affects earnings. Cash flows from hedging activities are reported in the Consolidated Statements of Cash Flows in the same classification as the hedged item, generally as a component of cash flows from operations. The fair value of the interest rate swap is determined using widely accepted valuation techniques and reflects the contractual terms of the interest rate swap including the period to maturity, and while there are no quoted prices in active markets, it uses observable market-based inputs, including interest rate curves. The fair value analysis also considers a credit valuation adjustment to reflect nonperformance risk of both the Company and the single counterparty. The interest rate swap is classified as a Level 2 item within the fair value hierarchy.

On February 23, 2022, we entered into an interest rate cap ("the Cap") with an effective date of July 1, 2023. On March 20, 2023, we amended the Cap to replace the current reference rate (LIBOR) with SOFR, to be consistent with Amendment No. 1 to the Credit Agreement. See Note 8. Debt for further information. The Cap manages our exposure to interest rate movements on a portion of our floating rate debt. The Cap provides us with the right to receive payment if one-month SOFR exceeds 1.92%. Beginning in July 2023, we will begin to pay a fixed monthly premium based on an annual rate of 0.853% for the Cap. The Cap will carry a notional amount ranging from $500 million to $1,500 million. The fair value of the interest rate cap of $50 million and $46 million is recognized in the Consolidated Balance Sheets within prepaid and other current and other assets as of June 30, 2024 and June 30, 2023, respectively.

The Cap, as amended, is designed to mirror the terms of the Company's Credit Agreement as amended on March 31, 2023. We designated the Cap as a cash flow hedge of the variability of the SOFR based interest payments on the Term Facilities. Every period over the life of the hedging relationship, the entire change in fair value related to the hedging instrument will first be recorded within Accumulated other comprehensive income (loss). Amounts accumulated in accumulated other comprehensive income (loss) will be reclassified into interest expense in the same period or periods in which interest expense is recognized on the Credit Agreement, or its direct replacement. The fair value of the Cap is determined using widely accepted valuation techniques and reflects the contractual terms of the Cap including the period to maturity, and while there are no quoted prices in active markets, it uses observable market-based inputs, including interest rate curves. The fair value analysis also considers a credit valuation adjustment to reflect nonperformance risk of both the Company and the single counterparty. The Cap is classified as a Level 2 item within the fair value hierarchy.

We estimated the fair value of the Senior Notes, Term A Facility and Term B Facility ("Debt Facilities") based on quoted market prices as of the last trading day prior to June 30, 2024; however, the Debt Facilities have only a limited trading volume and as such this fair value estimate is not necessarily the value at which the Debt Facilities could be retired or transferred. We concluded that this fair value measurement should be categorized within Level 2. The carrying values of the Debt Facilities are net of unamortized discount and issuance costs. See Note 8. Debt for further information on the Company's debt facilities.

The fair value and carrying value of the Debt Facilities were as follows at June 30, 2024 ($000):

	Fair Value	Carrying Value
Senior Notes	$ 938,193	$ 984,061
Term A Facility	777,564	762,039
Term B Facility	2,390,497	2,334,701

Our borrowings, including our lease obligations and the Debt Facilities, are considered Level 2 among the fair value hierarchy.

Cash and cash equivalents are considered Level 1 among the fair value hierarchy and approximate fair value because of the short-term maturity of those instruments.

At June 30, 2024, total restricted cash of $864 million includes $858 million of cash in Silicon Carbide LLC that is restricted for use only by that subsidiary and $5 million of cash restricted for other purposes in other entities. At June 30, 2023, total restricted cash of $16 million consisted of cash restricted for other purposes in other entities. The restricted cash is invested in money market accounts and time deposits, with maturities of one year or less, that are held-to-maturity, are considered Level 1 among the fair value hierarchy and approximate fair value. Restricted cash that is expected to be spent and released from restriction after 12 months is classified as non-current on the Consolidated Balance Sheets.

We, from time to time, purchase foreign currency forward exchange contracts, that permit us to sell specified amounts of these foreign currencies for pre-established U.S. dollar amounts at specified dates that represent assets or liabilities on the balance sheets of certain subsidiaries. These contracts are entered into for the purposes of limiting translational exposure to changes in currency exchange rates and which otherwise would expose our earnings, on the revaluation of our aggregate net assets or liabilities in respective currencies, to foreign currency risk. At June 30, 2024, we had foreign currency forward contracts recorded at fair value. The fair values of these instruments were measured using valuations based upon quoted prices for similar assets and liabilities in active markets (Level 2) and are valued by reference to similar financial instruments, adjusted for credit risk and restrictions and other terms specific to the contracts. Realized losses related to these contracts for the year ended June 30, 2024 were $15 million and for June 30, 2023 and June 30, 2022 were gains of $0.2 million and losses of $27 million, respectively, and were included in Other expense (income), net in the Consolidated Statements of Earnings (Loss).

Our non-financial assets, such as goodwill, intangible assets, and property, plant and equipment, are assessed for impairment when an event or circumstance indicates that a decline in value may have occurred. See Note 1. Nature of Business and Summary of Significant Accounting Policies for further information.

Note 17. Employee Benefit Plans

Eligible employees of the Company participate in an employee retirement plan. Under the Coherent Corp 401(k) Profit Sharing Plan ("Plan"), we match employee contributions to the plan equal to an amount of 50% of employee contributions up to a maximum of 8% of the employee's individual earnings subject to IRS limitations. Employees become eligible for participation and Company matching contributions on their first day of employment. The Company's matching contributions (net of forfeitures) during fiscal 2024, 2023 and 2022 were $18 million, $11 million, and $10 million, respectively. In addition, the Plan has a profit sharing retirement plan contribution for eligible U.S. employees of the Company. These contributions are made at the discretion of the Company's Board of Directors and were $2 million for each of the years ended June 30, 2024, 2023 and 2022.

Under the Coherent, Inc. Employee Retirement and Investment Plan, we matched employee contributions through December 31, 2023 to the plan up to a maximum of 4% of the employee's individual earnings subject to IRS limitations. Employees become eligible for participation and Company matching contributions on their first day of employment. The Company's matching contributions (net of forfeitures) during fiscal 2024 and 2023 were $3 million and $7 million, respectively. Effective January 1, 2024, we merged the Coherent, Inc. Employee Retirement and Investment Plan into the Plan.

Switzerland Defined Benefit Plan

The Company maintains a pension plan covering employees of our Swiss subsidiary (the "Swiss Plan"). Employer and employee contributions are made to the Swiss Plan based on various percentages of salary and wages that vary according to employee age and other factors. Employer contributions to the Swiss Plan were $4 million for both years ended June 30, 2024 and 2023. Net periodic pension cost is not material for any year presented.

The underfunded pension liability was $17 million and $11 million as of June 30, 2024 and 2023, respectively. The pension adjustment amount recognized in accumulated other comprehensive income (loss) was a $7 million decrease for both fiscal years ended June 30, 2024 and 2023. The accumulated benefit obligation was $106 million as of June 30, 2024, compared to $97 million as of June 30, 2023.

Coherent, Inc. Defined Benefit Plans

As a result of the Coherent, Inc. acquisition on July 1, 2022, we assumed all assets and liabilities of defined benefit plans in the U.S., Germany, South Korea, Japan, Spain, and Italy ("acquired plans"). As is the customary practice with European and Asian companies, the plans are unfunded, with the exception of the Spanish plan which is partially funded. The U.S. qualified plan is also partially funded. Any new employees hired after January 1, 2007, are not eligible for the U.S. qualified and nonqualified plans. Effective August 31, 2018, both of the U.S. plans were amended to freeze all future compensation benefit accruals. Any new employees hired after 2000 are not eligible for the primary German pension plans. For two of the German plans and the U.S. qualified plan, unrealized gains and losses are recognized as a component of other comprehensive income (loss) within shareholders' equity. For the other plans, we have elected to recognize all actuarial gains and losses on these plans immediately, as incurred.

Liabilities and expense for pension benefits are determined using actuarial methodologies and incorporate significant assumptions, including the interest rate used to discount the future estimated cash flows, the expected long-term rate of return on plan assets, and several assumptions relating to the employee workforce (salary increases, retirement age, and mortality). All of these assumptions were based upon management's judgment, considering all known trends and uncertainties. Actual results that differ from these assumptions would impact future expense recognition and the cash funding requirements of our defined benefit plans.

For the acquired plans, employer contributions in the years ended June 30, 2024 and June 30, 2023 were $2 million and $1 million, respectively, and net periodic pension cost was not material in either year. The underfunded pension liability was $34 million and $32 million as of June 30, 2024 and June 30, 2023, respectively. The pension adjustment amount recognized in accumulated other comprehensive income (loss) was a $1 million decrease and a $1 million increase for the fiscal years ended June 30, 2024 and June 30, 2023, respectively. The accumulated benefit obligation was $44 million and $42 million as of June 30, 2024 and June 30, 2023, respectively.

Estimated future benefit payments under all plans are estimated to be as follows ($000):

Year Ending June 30,		
2025	$	9,100
2026		7,800
2027		7,800
2028		8,500
2029		9,500
Next five years		53,000

Note 18. Other Accrued Liabilities

The components of other accrued liabilities were as follows ($000):

June 30,		**2024**		**2023**
Contract liabilities	$	62,123	$	104,477
Warranty reserves		44,193		47,563
Other accrued liabilities		188,390		158,241
	$	294,706	$	310,281

Note 19. Commitments and Contingencies

We have purchase commitments for materials and supplies as part of the ordinary conduct of business. A portion of the commitments are long-term and are based on minimum purchase requirements. Certain short-term raw material purchase commitments have a variable price component which is based on market pricing at the time of purchase. Due to the proprietary nature of some of our materials and processes, certain contracts may contain liquidated damage provisions for early termination. We do not believe that a significant amount of liquidated damages are reasonably likely to be incurred under these commitments, based upon historical experience and current expectations. Total future purchase commitments held by Coherent as of June 30, 2024 were $697 million in fiscal 2025 and $54 million thereafter.

Note 20. Share Repurchase Programs

In August 2014, the Company's Board of Directors authorized the Company to purchase up to $50 million of its common stock through a share repurchase program (the "Program") that calls for shares to be purchased in the open market or in private transactions from time to time. The Program has no expiration and may be suspended or discontinued at any time. Shares purchased by the Company are retained as treasury stock and available for general corporate purposes. We did not repurchase any shares pursuant to this Program during the fiscal years ended June 30, 2024 or June 30, 2023. As of June 30, 2024, we have cumulatively purchased 1,416,587 shares of Coherent common stock pursuant to the Program for approximately $22 million. On February 21, 2024, the Company's Board of Directors terminated the Program and any remaining amount authorized for the repurchase of shares.

Note 21. Accumulated Other Comprehensive Income (Loss)

The changes in accumulated other comprehensive income (loss) by component, net of tax, for the years ended June 30, 2024, 2023, and 2022 were as follows ($000):

	Foreign Currency Translation Adjustment	Interest Rate Swap	Interest Rate Cap	Defined Benefit Pension Plan	Total Accumulated Other Comprehensive Income (Loss)
AOCI - June 30, 2021	$ 55,395	$ (31,773)	$ —	$ (9,355)	$ 14,267
Other comprehensive income (loss) before reclassifications	(89,967)	29,711	14,306	15,300	(30,650)
Amounts reclassified from AOCI	—	13,797	—	419	14,216
Net current-period other comprehensive income (loss)	(89,967)	43,508	14,306	15,719	(16,434)
AOCI - June 30, 2022	$ (34,572)	$ 11,735	$ 14,306	$ 6,364	$ (2,167)
Other comprehensive income (loss) before reclassifications	87,927	27,050	22,322	(5,326)	131,973
Amounts reclassified from AOCI	—	(19,301)	—	(779)	(20,080)
Net current-period other comprehensive income (loss)	87,927	7,749	22,322	(6,105)	111,893
AOCI - June 30, 2023	$ 53,355	$ 19,484	$ 36,628	$ 259	$ 109,726
Other comprehensive income (loss) before reclassifications	(82,318)	9,529	15,420	(6,708)	(64,077)
Amounts reclassified from AOCI	—	(32,414)	(12,731)	(735)	(45,880)
Net current-period other comprehensive income (loss)	(82,318)	(22,885)	2,689	(7,443)	(109,957)
AOCI - Reclass related to sale of shares to noncontrolling interests	2,871	—	—	—	2,871
AOCI - June 30, 2024	$ (26,092)	$ (3,401)	$ 39,317	$ (7,184)	$ 2,640

Note 22. Restructuring Plan

Restructuring Plan

On May 23, 2023, the Board of Directors approved the Company's May 2023 Restructuring Plan which includes site consolidations, facilities moves and closures, as well as the relocation and requalification of certain manufacturing facilities. These restructuring actions are expected to be accompanied by other cost reductions and are intended to realign our cost structure as part of a transformation to a simpler, more streamlined, resilient and sustainable business model. We evaluate restructuring charges in accordance with ASC 420, Exit or Disposal Cost Obligations, and ASC 712, Compensation-Nonretirement Post-Employment Benefits (ASC 712).

In fiscal 2024, these activities resulted in $27 million of charges primarily for acceleration of depreciation, write-off of property and equipment, and site move costs. In fiscal 2023, these activities resulted in $119 million of charges primarily for employee termination and the write-off of property and equipment, net of $65 million from reimbursement arrangements. We expect the restructuring actions to be substantially completed by the end of fiscal 2025; however, the actual timing and costs associated with these restructuring actions may differ from our current expectations and estimates and such differences may be material.

Activity and accrual balances for the Restructuring Plan were as follows ($000):

	Severance		Asset Write-Offs		Other		Total Accrual	
Balance - June 30, 2022	$	—	$	—	$	—	$	—
Restructuring charges		76,944		107,157		—		184,101
Reimbursement arrangements		(9,247)		(55,753)		—		(65,000)
Reimbursement arrangement related accrual		9,247		—		—		9,247
Payments		(12,565)		—		—		(12,565)
Asset write-offs and other		—		(51,404)		—		(51,404)
Balance - June 30, 2023	$	64,379	$	—	$	—	$	64,379
Restructuring charges (recoveries)		(129)		11,658		15,527		27,056
Payments		(13,189)		—		—		(13,189)
Asset write-offs and other		—		(11,658)		(15,527)		(27,185)
Balance - June 30, 2024	$	51,061	$	—	$	—	$	51,061

At June 30, 2024, $15 million and $37 million of accrued severance related costs were included in other accrued liabilities and other liabilities on our Consolidated Balance Sheet, respectively, and are expected to result in cash expenditures through fiscal 2028. The current year severance related recoveries are primarily comprised of adjustments to accruals for severance pay for employees being terminated due to the consolidation of certain manufacturing sites, with severance recorded in accordance with ASC 712. The current year asset write-offs are primarily comprised of specifically identified equipment write-offs due to the consolidation of certain manufacturing sites. The fiscal 2023 severance related costs are primarily comprised of severance pay for employees being terminated due to the consolidation of certain manufacturing sites, with severance recorded in accordance with ASC 712. The fiscal 2023 asset write-offs are primarily comprised of specifically identified equipment write-offs due to the consolidation of certain manufacturing sites. At June 30, 2023, a $50 million receivable under a reimbursement arrangement was recorded in Prepaid and other current assets; the receivable was received during fiscal 2024.

By segment in fiscal 2024, $(4) million, $28 million and $4 million of restructuring costs (recoveries) were incurred in the Networking, Materials and Lasers segments, respectively. By segment in fiscal 2023, $56 million, $60 million and $3 million of restructuring costs were incurred in the Networking, Materials and Lasers segments, respectively. Restructuring charges are recorded in Restructuring charges in our Consolidated Statements of Earnings (Loss).

SCHEDULE II

COHERENT CORP. AND SUBSIDIARIES

VALUATION AND QUALIFYING ACCOUNTS
YEARS ENDED JUNE 30, 2024, 2023, AND 2022
(IN THOUSANDS OF DOLLARS)

	Balance at Beginning of Year	Charged to Expense	Charged to Other Accounts	Deduction from Reserves	Balance at End of Year
YEAR ENDED JUNE 30, 2024:					
Allowance for doubtful accounts	$ 8,005	$ 5,161	$ —	$ (3,655) (3)	$ 9,511
Warranty reserves	$ 47,563	$ 34,362	$ —	$ (37,732)	$ 44,193
Deferred tax asset valuation allowance	$ 97,180	$ 57,968	$ (318) (2)	$ —	$ 154,830
YEAR ENDED JUNE 30, 2023:					
Allowance for doubtful accounts	$ 4,206	$ 1,793	$ 3,112 (1)	$ (1,106) (3)	$ 8,005
Warranty reserves	$ 17,738	$ 40,475	$ 29,196 (1)	$ (39,846)	$ 47,563
Deferred tax asset valuation allowance	$ 55,420	$ 4,035	$ 37,725 (1,2)	$ —	$ 97,180
YEAR ENDED JUNE 30, 2022:					
Allowance for doubtful accounts	$ 924	$ 3,292	$ —	$ (10) (3)	$ 4,206
Warranty reserves	$ 21,868	$ 7,718	$ —	$ (11,848)	$ 17,738
Deferred tax asset valuation allowance	$ 53,765	$ 2,157	$ (502) (2)	$ —	$ 55,420

(1) Related to amounts assumed from the Coherent, Inc. acquisition.
(2) Primarily related to currency translation adjustments.
(3) Primarily relates to write-offs of accounts receivable.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management evaluated, with the participation of the Company's Chief Executive Officer, and the Company's Chief Financial Officer and Treasurer, the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) as of the end of the period covered by this Annual Report on Form 10-K. The Company's disclosure controls were designed to provide reasonable assurance that information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. However, the controls have been designed to provide reasonable assurance of achieving the controls' stated goals. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2024, the Company's disclosure controls and procedures were effective.

Management's Report on Internal Control Over Financial Reporting

Refer to Management's Report on Internal Control Over Financial Reporting included in Item 8 of this Annual Report on Form 10-K.

Report of the Registered Public Accounting Firm

The report of Ernst & Young LLP, an independent registered public accounting firm, with respect to our internal control over financial reporting is included in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

During our most recent quarter, there have been no changes in the Company's internal controls over financial reporting identified in connection with management's evaluation of the effectiveness of the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. OTHER INFORMATION

During the three months ended June 30, 2024, no director or officer (as defined in Rule 16a-1(f) of the Exchange Act) of the Company adopted, modified or terminated a "Rule 10b5-1 trading agreement" or "non-Rule 10b5-1 trading agreement," as each term is defined in Item 408 of Regulation S-K.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information set forth above in Part I of this Annual Report on Form 10-K under the caption "Executive Officers of the Registrant" is incorporated herein by reference. The other information required by this item, to the extent applicable, is incorporated herein by reference to the information set forth under the captions "Election of Directors" and if applicable, "Delinquent Section 16(a) Reports" in the Company's definitive proxy statement for the 2024 Annual Meeting of Shareholders to be filed pursuant to Regulation 14A of the Exchange Act (the "Proxy Statement").

Audit Committee Financial Expert

The information as to the Audit Committee and the Audit Committee Financial Expert is incorporated herein by reference to the information set forth in the Company's Proxy Statement.

Code of Ethics

The Company has adopted its Code of Business Conduct and Ethics for all of its employees. The Code of Ethical Business Conduct can be found on the Company's Internet web site at www.coherent.com under "Company – About Us – Governance." The Company will promptly disclose on its web site (i) any amendments or waivers with respect to a director's or executive officer's compliance with the Code of Business Conducts and Ethics and (ii) any amendments or waivers with respect to any provision of the Code of Ethics. Any person may also obtain a copy of the Code of Business Conduct and Ethics without charge by submitting their request to the Chief Financial Officer and Treasurer of Coherent Corp., 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056, or by calling (724) 352-4455.

We intend to satisfy any disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of the Code of Business Conduct and Ethics by posting such information on our web site.

The website and information contained on it or incorporated in it are not intended to be incorporated in this Annual Report on Form 10-K or other filings with the SEC.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information set forth under the caption "Director Compensation For Fiscal Year 2024," "Executive Compensation," "Compensation Committee Report" and "Compensation and Risk" in the Company's Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference to the information set forth under the captions "Equity Compensation Plan Information" and "Security Ownership of Certain Beneficial Owners and Management" in the Company's Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the information set forth under the caption "Director Independence and Corporate Governance Policies" in the Company's Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information set forth under the caption "Ratification of the Audit Committee's Selection of Independent Registered Public Accounting Firm" in the Company's Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Financial Statements

The financial statements are set forth under Item 8 of this Annual Report on Form 10-K.

(2) Schedules

Schedule II – Valuation and Qualifying Accounts for each of the three fiscal years in the period ended June 30, 2024 is set forth under Item 8 of this Annual Report on Form 10-K.

Financial statements, financial statement schedules and exhibits not listed have been omitted where the required information is included in the Consolidated Financial Statements or notes thereto, or is not applicable or required.

		Incorporated herein by reference			
Exhibit No.	Description	Form	Exhibit No.	Filing Date	File No.
2.01	Agreement and Plan of Merger, dated as of March 25, 2021, by and among II-VI Incorporated, Watson Merger Sub Inc. and Coherent, Inc.	8-K	2.1	March 26, 2021	001-39375
3.01	Amended and Restated Articles of Incorporation of II-VI Incorporated	8-K	3.1	November 8, 2011	000-16195
3.02	Articles of Amendment to Amended and Restated Articles of Incorporation	8-K	3.1	September 8, 2022	001-39375
3.03	Amended and Restated By-Laws of Coherent Corp. as amended and restated effective September 8, 2022	8-K	3.2	September 8, 2022	001-39375
3.04	Statement with Respect to Shares, filed with the Pennsylvania Department of State Corporations Bureau and effective July 6, 2020	10-K	3.03	August 26, 2020	001-39375
3.05	Statement with Respect to Shares, filed with the Pennsylvania Department of State Corporations Bureau and effective March 30, 2021	8-K	3.1	March 31, 2021	001-39375
4.01+	Description of Coherent Corp.'s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934				
4.02	Indenture, dated as of December 10, 2021, among Coherent Corp., the guarantors party thereto and U.S. Bank National Association, as trustee	8-K	4.1	December 10, 2021	001-39375
4.03	Form of 5.000% Senior Notes due 2029	8-K	4.2 (included in Exhibit 4.1)	December 10, 2021	001-39375
4.04	First Supplemental Indenture, dated as of July 1, 2022, among Coherent Corp., the guarantors party thereto and U.S. Bank National Association, as Trustee	10-K	4.05	August 18, 2023	001-39375
4.05	Second Supplemental Indenture, dated as of May 5, 2023, among Coherent Corp., the guarantors party thereto and U.S. Bank National Association, as Trustee	10-Q	4.01	May 10, 2023	001-39375
4.06	Third Supplemental Indenture, dated as of May 31, 2023, among Coherent Corp., the guarantors party thereto and U.S. Bank National Association, as Trustee	10-K	4.07	August 18, 2023	001-39375
4.07	Registration Rights Agreement, dated March 31, 2021, by and between II-VI Incorporated and BCPE Watson (DE) SPV, LP.	Schedule 13D	D	July 11, 2022	005-39319

10.01*	Credit Agreement, dated as of July 1, 2022, by and among II-VI Incorporated, the lenders and other parties from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent	8-K	10.1	July 1, 2022	001-39375
10.02	Amendment No. 1 to Credit Agreement, dated as of March 31, 2023, by and among Coherent Corp., JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, and the lenders party thereto	10-Q	10.1	May 10, 2023	001-39375
10.03	Amendment No. 2 to Credit Agreement, dated April 2, 2024, among Coherent Corp., JPMorgan Chase Bank, N.A., as administrative agent, the lenders party thereto and the other parties party thereto	8-K	10.1	April 3, 2024	001-39375
10.04	Investment Agreement, dated as of October 10, 2023 by and between Silicon Carbide LLC and Denso Corporation	8-K	10.1	October 10, 2023	001-39375
10.05	Investment Agreement, dated as of October 10, 2023 by and between Silicon Carbide LLC and Mitsubishi Electric Corporation	8-K	10.1	October 10, 2023	001-39375
10.06	Form of Indemnification Agreement between II-VI Incorporated and its directors and officers	10-K	10.15	August 28, 2018	000-16195
10.07**	Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods prior to January 1, 2015)	10-K	10.17	August 28, 2015	000-16195
10.08**	Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods after January 1, 2015)	10-K	10.18	August 28, 2015	000-16195
10.09**	II-VI Incorporated 2012 Omnibus Incentive Plan	8-K	10.01	November 5, 2012	000-16195
10.10**	Form of Nonqualified Stock Option under the II-VI Incorporated 2012 Omnibus Incentive Plan	10-K	10.30	August 28, 2013	000-16195
10.11**	II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan	S-8	10.1	November 4, 2014	333-199855
10.12**	Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan	10-K	10.30	August 28, 2013	000-16195
10.13**	II-VI Incorporated Second Amended and Restated 2012 Omnibus Incentive Plan	10-Q	10.01	February 2, 2016	000-16195
10.14**	Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Second Amended and Restated 2012 Omnibus Incentive Plan	10-Q	10.03	November 8, 2016	000-16195
10.15**	II-VI Incorporated Amended and Restated 2018 Omnibus Incentive Plan	S-8	99.1	November 10, 2020	333-249995
10.16**	Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Amended and Restated 2018 Omnibus Incentive Plan	10-Q	10.01	February 8, 2019	000-16195
10.17**	Coherent, Inc. Equity Incentive Plan	S-8	99.1	April 27, 2020	333-237855
10.18**	Coherent, Inc. Equity Incentive Plan - Form of Global Restricted Stock Unit Agreement	10-Q	10.2	August 12, 2020	001-33962
10.19**	Coherent, Inc. Equity Incentive Plan - Form of Performance Restricted Stock Unit Agreement	10-Q	10.3	August 12, 2020	001-33962
10.20**	2005 Deferred Compensation Plan	10-K/A	10.6	February 1, 2021	001-33962
10.21**	Coherent, Corp. Omnibus Incentive Plan	8-K	10.1	November 13, 2023	001-39375

10.22**	Form of Restricted Share Unit Settled in Shares Award Agreement under the Coherent Corp. Omnibus Incentive Plan	10-Q	10.05	February 6, 2024	001-39375
10.23**	Form of Performance Share Unit Award Agreement (Cash Flow; Share-Settled) under the Coherent Corp. Omnibus Incentive Plan	10-Q	10.06	February 6, 2024	001-39375
10.24**	Form of Performance Share Unit Award Agreement (Relative TSR; Share-Settled) under the Coherent Corp. Omnibus Incentive Plan	10-Q	10.07	February 6, 2024	001-39375
10.25**+	Description of Incentive Programs				
10.26**	Coherent Corp. Employee Stock Purchase Plan	8-K	10.2	November 13, 2023	001-39375
10.27**	Coherent Corp. Revised Executive Severance Plan	10-Q	10.03	May 7, 2024	001-39375
10.28**	Form of Participation Agreement for the Coherent Corp. Revised Executive Severance Plan	10-Q	10.04	May 7, 2024	001-39375
10.29**	Employment Agreement, dated October 3, 2012, by and between II-VI Incorporated and Giovanni Barbarossa	10-K	10.07	August 28, 2015	000-16195
10.30+**	Agreement, dated October 4, 2018, by and between II-VI Incorporated and Walter R. Bashaw II	10-K	10.26	August 16, 2023	001-39375
10.31**	Amended and Restated Employment Agreement, effective August 23, 2022, by and between II-VI Incorporated and Vincent D. Mattera, Jr.	8-K	10.1	August 23, 2022	001-39375
10.32**	CEO Succession and Retirement Agreement, dated February 17, 2024, by and between Coherent Corp. and Dr. Vincent D. Mattera, Jr.	8-K	10.1	February 20, 2024	001-39375
10.33**	Consulting Agreement, dated June 12, 2023, by and between Coherent Corp. and Mark Sobey	10-K	10.29	August 18, 2023	001-39375
10.34**	Transition Services and Final Agreement, dated September 13, 2023, by and between Coherent Corp. and Mary Jane Raymond	8-K	10.1	September 15, 2023	001-39375
10.35**	Offer Letter with Richard Martucci, dated September 13, 2023	8-K	10.2	September 15, 2023	001-39375
10.36**	Offer Letter between James R. Anderson and Coherent Corp. dated May 31, 2024	8-K	10.1	June 3, 2024	001-39375
10.37**	Form of Award Agreement for Inducement RSUs	8-K	10.2	June 3, 2024	001-39375
10.38**	Form of Award Agreement for Inducement PSUs	8-K	10.3	June 3, 2024	001-39375
19.01+	Coherent Corp. and its subsidiaries Insider Trading and Tipping Policy, effective September 25, 2018				
21.01+	List of Subsidiaries of Coherent Corp.				
23.01+	Consent of Ernst & Young LLP				
31.01+	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002				
31.02+	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002				

32.01+	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.02+	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
97.01+	Coherent Corp. Compensation Recovery ("Clawback") Policy
101	Interactive Data File
(101.INS)	Inline XBRL Instance Document
(101.SCH)	Inline XBRL Taxonomy Extension Schema Document
(101.CAL)	Inline XBRL Taxonomy Extension Calculation Linkbase Document
(101.DEF)	Inline XBRL Taxonomy Definition Linkbase
(101.LAB)	Inline XBRL Taxonomy Extension Label Linkbase Document
(101.PRE)	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

\+ Filed herewith

* Certain schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule or exhibit will be furnished supplementally to the SEC upon request.

** Identifies management contract or compensatory plans, contracts or arrangements required to be filed as an exhibit.

Item 16. FORM 10-K SUMMARY

None.

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.

	COHERENT CORP.	
Date: August 16, 2024	By:	/s/ James R. Anderson
		James R. Anderson
		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.

	Principal Executive Officer:	
Date: August 16, 2024	By:	/s/ James R. Anderson
		James R. Anderson
		Chief Executive Officer and Director
	Principal Financial Officer:	
Date: August 16, 2024	By:	/s/ Richard Martucci
		Richard Martucci
		Interim Chief Financial Officer and Treasurer
	Principal Accounting Officer:	
Date: August 16, 2024	By:	/s/ Ilaria Mocciaro
		Ilaria Mocciaro
		Senior Vice President, Chief Accounting Officer and Corporate Controller
Date: August 16, 2024	By:	/s/ Enrico Digirolamo
		Enrico Digirolamo
		Chairman of the Board
Date: August 16, 2024	By:	/s/ Joseph J. Corasanti
		Joseph J. Corasanti
		Director
Date: August 16, 2024	By:	/s/ Michael L. Dreyer
		Michael L. Dreyer
		Director
Date: August 16, 2024	By:	/s/ Patricia Hatter
		Patricia Hatter
		Director
Date: August 16, 2024	By:	/s/ David L. Motley
		David L. Motley
		Director
Date: August 16, 2024	By:	/s/ Lisa Neal-Graves
		Lisa Neal-Graves
		Director
Date: August 16, 2024	By:	/s/ Stephen Pagliuca

		Stephen Pagliuca Director
Date: August 16, 2024	By:	/s/ Elizabeth A. Patrick Elizabeth A. Patrick Director
Date: August 16, 2024	By:	/s/ Shaker Sadasivam Shaker Sadasivam Director
Date: August 16, 2024	By:	/s/ Stephen A. Skaggs Stephen A. Skaggs Director
Date: August 16, 2024	By:	/s/ Michelle Sterling Michelle Sterling Director
Date: August 16, 2024	By:	/s/ Sandeep S. Vij Sandeep S. Vij Director
Date: August 16, 2024	By:	/s/ Howard H. Xia Howard H. Xia Director

[THIS PAGE INTENTIONALLY LEFT BLANK]

[THIS PAGE INTENTIONALLY LEFT BLANK]

SHAREHOLDER INFORMATION

ANNUAL MEETING
The annual meeting of shareholders will be held virtually via live webcast on Thursday, November 14, 2024, at 12:00 pm ET at virtualshareholdermeeting.com/COHR2024.

COMPANY NEWS
Visit coherent.com for Securities and Exchange Commission filings, quarterly earnings reports, and other company news.

Copies of the annual report/Form 10-K and Forms 10-Q may be requested at no cost by writing to Investor Relations, Coherent Corp., 375 Saxonburg Blvd., Saxonburg, PA 16056.

INVESTOR INFORMATION
Securities analysts and investors may write to Investor Relations, Coherent Corp., 375 Saxonburg Blvd., Saxonburg, PA 16056; call 1.724.352.4455; or email investor.relations@coherent.com.

OTHER PUBLICATIONS
For Coherent's ESG Report, visit coherent.com.

STOCK LISTING
The common stock of Coherent Corp. is traded on the New York Stock Exchange under the trading symbol "COHR."

TRANSFER AGENT
Equiniti Trust Company, LLC
55 Challenger Road, 2nd Floor
Ridgefield Park, NJ 07660
1.800.937.5449

INNOVATIONS THAT RESONATE

Coherent Corp.
375 Saxonburg Boulevard, Saxonburg, PA 16056
724.352.4455 | www.coherent.com