

2020 ANNUAL REPORT

Annual Report, Proxy Statement & Notice of Annual Meeting





Notice of Annual Meeting of Stockholders

May 6, 2021

8:30 a.m., Pacific Time

As part of our continuing precautions regarding the Coronavirus Disease (COVID-19), we are holding this year's annual meeting solely by means of remote communication. If we hold an annual meeting in 2022, we expect that we will revert to an in-person meeting, if appropriate.

If you plan to participate in our annual meeting, please see the instructions in the accompanying proxy statement. Stockholders will be able to listen, vote and submit questions (subject to the question guidelines) from any remote location that has Internet connectivity. There will be no physical location for stockholders to attend the meeting. Stockholders may participate in the meeting only by logging in at www.virtualshareholdermeeting.com/COHR2021.

MATTERS TO BE VOTED ON:

- 1. To elect the eight directors named in the accompanying proxy statement;
- 2. To approve our amended and restated Employee Stock Purchase Plan;
- 3. To ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2021;
- 4. To approve on a non-binding, advisory basis, our named executive officer compensation; and
- 5. To transact such other business as may properly be brought before the meeting and any adjournment(s) thereof.

The foregoing items of business are more fully described in the proxy statement accompanying this notice.

Stockholders of record at the close of business on March 12, 2021 are entitled to notice of and to vote at the meeting and at any adjournments or postponements thereof. All stockholders are cordially invited to attend and participate in our virtual meeting. However, to ensure your representation at the meeting, you are urged to vote in advance. You may vote via the Internet or by telephone, or if you requested to receive printed proxy materials, by marking, signing, dating and returning the proxy card as promptly as possible in the postage-prepaid envelope provided for that purpose.

We have retained Georgeson LLC to assist us in the solicitation of proxies. If you have any questions or require any assistance with completing your proxy, please contact Georgeson LLC by telephone at (866) 647-8872.

Santa Clara, California March 19, 2021 Sincerely,

Bret DiMarco
Executive Vice President, Chief Legal Officer and
Corporate Secretary

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to Be Held on May 6, 2021

The proxy statement and annual report to stockholders are available at www.proxyvote.com.



PROXY STATEMENT 2021 ANNUAL MEETING OF STOCKHOLDERS

TABLE OF CONTENTS

GENERAL INFORMATION ABOUT THE MEETING	3
SPOTLIGHT ON GOVERNANCE	8
PROPOSAL ONE—ELECTION OF DIRECTORS	10
PROPOSAL TWO—APPROVAL OF OUR AMENDED AND RESTATED EMPLOYEE STOCK PURCHASE PLAN	22
PROPOSAL THREE—RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	26
PROPOSAL FOUR—APPROVAL, ON A NON-BINDING, ADVISORY BASIS, OF OUR NAMED EXECUTIVE OFFICER COMPENSATION	28
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	29
OUR EXECUTIVE OFFICERS	31
COMPENSATION DISCUSSION AND ANALYSIS	32
SUMMARY COMPENSATION AND EQUITY TABLES	51
PAY RATIO	59
CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS	60
REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS	61
OTHER MATTERS	62
APPENDIX A—COHERENT INC. EMPLOYEE STOCK PURCHASE PLAN	Δ-1

GENERAL INFORMATION ABOUT THE MEETING

General

The Board of Directors (the "Board") of Coherent, Inc. ("Coherent" or the "Company") is soliciting proxies for use at the virtual Annual Meeting of Stockholders (the "Annual Meeting" or "meeting") to be held at 8:30 a.m., Pacific Time, on May 6, 2021 and at any adjournment(s) thereof, for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. There will be no physical location for stockholders to attend the meeting.

You can participate in the Annual Meeting by logging in at www.virtualshareholdermeeting.com/COHR2021, where you will be able to listen to the meeting live, vote and submit questions. These proxy solicitation materials were first mailed on or about March 19, 2021 to all stockholders entitled to vote at the Annual Meeting.

Who May Vote at the Meeting?

You are entitled to vote at the Annual Meeting if you held your shares as of the close of business on our record date, March 12, 2021 (the "Record Date"). On the Record Date, 24,463,754 shares of our common stock, \$0.01 par value, were issued and outstanding.

What Does Each Share of Common Stock I Own Represent?

On all matters, each share has one vote, unless, with respect to Proposal One regarding the election of directors, cumulative voting is in effect. See "Proposal One—Election of Directors—Vote Required" for a description of cumulative voting rights with respect to the election of directors.

How Can I Participate in the Virtual Annual Meeting?

To participate in the meeting, visit www.virtualshareholdermeeting.com/COHR2021 and enter your 16-digit control number as indicated. You can find your 16-digit control number on your proxy card or on the instructions that accompanied your proxy materials. You will be able to log into the virtual meeting platform beginning at 8:15 a.m. PDT on May 6, 2021. The meeting will begin promptly at 8:30 a.m. PDT on May 6, 2021. We encourage you to log in and ensure you can hear streaming audio prior to the meeting start time.

The virtual meeting platform is supported across browsers (Internet Explorer, Firefox, Chrome, and Safari) and devices (desktops, laptops, tablets, and cell phones) running the most updated version of applicable software and plugins. Participants should ensure that they have a strong WiFi connection wherever they intend to participate in the meeting.

If you wish to submit a question during the meeting, log into the virtual meeting platform, type your question into the "Ask a Question" field, and click "Submit." Questions pertinent to meeting matters will be answered during the meeting, subject to time constraints. Questions regarding personal matters, including those related to employment, product or service issues, or suggestions for product innovations, are not pertinent to meeting matters and, therefore, will not be answered. In the event we are not able to address any questions appropriately related to the business of the Company due to time constraints, we will address them at an upcoming financial results conference call.

If you encounter any difficulties accessing the virtual meeting during check-in please call the technical support number that will be posted on the virtual meeting platform's log in page.

Why Did I Receive a One-Page Notice in the Mail Regarding the Internet Availability of Proxy Materials Instead of a Full Set of Proxy Materials?

In accordance with the Securities and Exchange Commission ("SEC") rules, we are furnishing proxy materials to our stockholders primarily via the Internet, instead of mailing printed copies of those materials to each stockholder. On March 19, 2021, we commenced mailing a Notice Regarding the Availability of Proxy Materials to our stockholders (other than those who had previously requested electronic or paper delivery) containing instructions on how to access our proxy materials, including this proxy statement and our annual report. The Notice Regarding the Availability of Proxy Materials sets forth instructions on how to vote over the Internet and also how to request paper copies if that is your preference.

This process is designed to provide stockholders with easy access to our proxy materials, while reducing the printing, distribution and environmental costs of the proxy process. However, if you would prefer to receive printed proxy materials, please follow the instructions included in the Notice Regarding the Availability of Proxy Materials.

How Does a Stockholder Vote?

Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. If you are entitled to vote, you may do so as follows:

- Through the Internet—Before the Annual Meeting: If you are a stockholder of record, go to www.proxyvote.com. Please have your proxy card in hand when you visit the website.
- Through the Internet—During the Annual Meeting: If you are a stockholder of record, you may vote live at the Annual Meeting through the virtual meeting platform by logging into www.virtualshareholdermeeting.com/COHR2021. If your shares are held in street name, you will need to obtain a legal proxy from your broker, bank or other nominee in order to vote live at the Annual Meeting.
- **Using the Telephone:** Dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the 16-digit control number, which you can find on your proxy card or on the instructions that accompanied your proxy materials.
- Through Your Broker: If your shares are held through a broker, bank or other nominee (commonly referred to as held in "street name"), you will receive instructions from them that you must follow to have your shares voted.
- Returning a Proxy Card: If you have requested printed proxy materials, simply complete, sign and date the proxy card and return it promptly in the envelope provided. If your signed proxy card is received before the Annual Meeting, the designated proxies will vote your shares as you direct.

For telephone or Internet use before the meeting, your vote must be received by 11:59 p.m., Eastern time, on May 5, 2021 to be counted.

If you return a signed and dated proxy card *without* marking any voting directions, your shares will be voted "For" the election of all eight nominees for director set forth in this proxy statement and "For" Proposals Two, Three and Four.

We have retained Georgeson LLC to assist us in the solicitation of proxies. If you have any questions or require any assistance with voting, please contact Georgeson LLC by telephone at (866) 647-8872.

Matters to be Presented at the Meeting

We are not aware of any matters to be presented at the meeting other than those described in this proxy statement. If any other matter is properly presented at the Annual Meeting, your proxy holders (one of the individuals named on your proxy card) will vote your shares in their discretion. The cost of this solicitation will be borne by us. We may reimburse brokerage firms and other persons representing beneficial owners of shares for their expenses in forwarding solicitation material to such beneficial owners. In addition, proxies may be solicited by certain of our directors, officers and regular employees, without additional compensation, personally or by telephone, e-mail or facsimile. We have also retained Georgeson LLC to assist us in the solicitation of proxies. We expect to pay Georgeson LLC approximately \$15,000 for these services, plus expenses.

Revoking Your Proxy

If you hold your shares in street name, you must follow the instructions of your broker, bank or other nominee to revoke your voting instructions. If you are a holder of record and wish to revoke your proxy instructions, you must (i) advise the Corporate Secretary in writing by sending an email to investor.relations@coherent.com before the proxies vote your shares at the meeting, (ii) timely deliver later-dated proxy instructions or (iii) participate in the meeting and vote your shares electronically during the meeting.

Quorum; Broker Non-Votes; Abstentions

Our bylaws provide that stockholders holding a majority of the shares of common stock issued and outstanding and entitled to vote on the Record Date constitute a quorum at meetings of stockholders. Votes will be counted by the inspector of election appointed for the Annual Meeting, who will separately count "For" and "Against" votes, abstentions and broker non-votes.

A "broker non-vote" occurs when a nominee holding shares for a beneficial owner does not vote because the nominee does not have discretionary voting power with respect to the proposal and has not received instructions with respect to the proposal from the beneficial owner. Broker non-votes represented by submitted proxies will not be taken into account in determining the outcome of any proposal.

Abstentions will not be taken into account in determining the outcome of the election of directors. However, abstentions will have the same effect as a vote "Against" Proposals Two, Three and Four. We intend to separately report abstentions, and our Compensation and HR Committee will generally view abstentions as neutral when considering the results of Proposal Four.

Deadline for Receipt of Stockholder Proposals or Nominations; Proxy Access

In order to submit stockholder proposals for inclusion in our proxy statement pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") for the annual meeting to be held in fiscal 2022, written materials must be received by our Corporate Secretary at our principal executive offices in Santa Clara, California no later than November 19, 2021. Stockholder proposals must otherwise comply with the requirements of Rule 14a-8 under the Exchange Act.

Proposals must be addressed to: Bret DiMarco, Corporate Secretary, Coherent, Inc., 5100 Patrick Henry Dr., Santa Clara, California 95054. Simply submitting a proposal does not guarantee its inclusion.

Section 2.16 of the Company's bylaws also establishes an advance notice procedure with respect to director nominations and stockholder proposals that are not submitted for inclusion in the proxy statement, but that a stockholder instead wishes to present directly from the floor at any annual meeting. To be properly brought before the annual meeting to be held in fiscal 2022, a notice of the nomination or the matter the stockholder wishes to present at the meeting must be received by our Corporate Secretary (see above) at our principal executive offices no later than the 45th day (February 2, 2022), nor earlier than the 75th day (January 3, 2022), prior to the one-year anniversary of the date these proxy materials were first mailed by us, unless the annual meeting of stockholders is held prior to April 6, 2022 or after July 5, 2022, in which case, the proposal must be received by our Corporate Secretary not earlier than the close of business on the 120th day prior to the annual meeting and not later than the close of business on the later of (i) the 90th day prior to the annual meeting and (ii) the tenth day following the day on which public announcement of the date of such meeting is first made, and must otherwise be in compliance with applicable laws and regulations in order to be considered for inclusion in the proxy statement and form of proxy relating to that meeting. We have not received any notice regarding any such matters to be brought at the Annual Meeting.

General Information

If a stockholder who has notified us of his or her intention to present a proposal at an annual meeting does not appear to present his or her proposal at such meeting, we need not present the proposal for vote at such meeting. The chairperson of the Annual Meeting has the final discretion whether or not to allow any matter to be considered at the meeting which did not timely comply with all applicable notice requirements.

If a stockholder wishes only to recommend a candidate for consideration by the Governance and Nominating Committee as a potential nominee for the Company's Board, see the procedures discussed in "Proposal One—Election of Directors—Process for Stockholders to Recommend Candidates for Election to the Board of Directors."

The attached proxy card grants to the proxyholders discretionary authority to vote on any matter raised at the Annual Meeting, including proposals which are timely raised at the meeting, but did not meet the deadline for inclusion in this proxy statement.

In addition, our bylaws provide that, under certain circumstances, a stockholder or group of stockholders may include director candidates that they have nominated in our proxy statement. These "proxy access" provisions permit a stockholder, or a group of up to 20 stockholders, who have owned 3% or more of our outstanding common stock continuously for at least three years to submit director nominees (for up to 20% of the number of directors then in office) for inclusion in our proxy materials, as long as the stockholder(s) provide timely written notice of such nomination and the stockholder(s) and nominee(s) satisfy the requirements specified in our bylaws. Notice of director nominees for our 2022 annual meeting of stockholders must include the information required under our bylaws and must be received by our Corporate Secretary (see above) at our principal executive offices no later than the close of business on the 120th day (October 20, 2021) and not earlier than the close of business on the 150th day (November 19, 2021) prior to the one-year anniversary of the date these proxy materials were first mailed by us, unless the annual meeting of stockholders is held prior to April 6, 2022 or after July 5, 2022, in which case, such notice must be received by our Corporate Secretary not earlier than the 90th day prior to the annual meeting and not later than the close of business on the later of (i) the 60th day prior to the annual meeting or (ii) the 10th day following the day on which public announcement of the date of such meeting is first made. For additional information regarding these proxy access provisions, please refer to our bylaws.

Eliminating Duplicative Proxy Materials

To reduce the expense of delivering duplicate voting materials to our stockholders who may hold shares of Coherent common stock in more than one stock account, we are delivering only one set of our proxy materials to certain stockholders who share an address, unless otherwise requested. A separate proxy card is included in the voting materials (either electronically or by mail, as applicable) for each of these stockholders.

We will promptly deliver, upon verbal request, a separate copy of the annual report or this proxy statement to a stockholder at a shared address to which a single copy of the documents was delivered. To obtain an additional copy, you may also write us at 5100 Patrick Henry Drive, Santa Clara, California 95054, Attn: Investor Relations, or contact our Investor Relations department by telephone at (408) 764-4110.

Similarly, if you share an address with another stockholder and have received multiple copies of our proxy materials, you may contact us at the address or telephone number specified above to request that only a single copy of these materials be delivered to your address in the future. Stockholders sharing a single address may revoke their consent to receive a single copy of our proxy materials in the future at any time by contacting our distribution agent, Broadridge, either by calling toll-free at 1-800-542-1061, or by writing to Broadridge, Householding Department, 51 Mercedes Way, Edgewood, NY 11717. It is our understanding that Broadridge will remove such stockholder from the householding program within 30 days of receipt of such written notice, after which each such stockholder will receive an individual copy of our proxy materials.

Incorporation by Reference

To the extent that this proxy statement has been or will be specifically incorporated by reference into any other filing of Coherent with the SEC, the sections of this proxy statement entitled "Report of the Audit Committee of the Board of Directors" (to the extent permitted by the rules of the SEC) and "Compensation Discussion and Analysis" shall not be deemed to be so incorporated, unless specifically provided otherwise in such filing.

Stockholder List

A list of stockholders entitled to vote at the Annual Meeting will be available for examination by stockholders of record at www.virtualshareholdermeeting.com/COHR2021 during the meeting.

FURTHER INFORMATION

We will provide without charge to each stockholder solicited by these proxy solicitation materials a copy of our annual report on Form 10-K for the fiscal year ended October 3, 2020 without exhibits and any amendments thereto upon request of such stockholder made in writing to Coherent, Inc., 5100 Patrick Henry Drive, Santa Clara, California 95054, Attn: Investor Relations. We will also furnish any exhibit to the annual report on Form 10-K if specifically requested in writing. You can also access our SEC filings, including our annual reports on Form 10-K, and all amendments thereto on the SEC website at www.sec.gov.

Spotlight on Governance

Our historical business results have been complemented by an approach to corporate governance that has consistently been recognized for including a number of governance "best practices," including:

- * Annual Board elections;
- No classified Board;
- * Stockholders may act by written consent;
- * Independent Board Chair;
- Majority voting for members of the Board in uncontested elections;
- "Proxy access" bylaw provisions;
- A clawback policy which applies to all executive officers of the Company;
- * No "blank check" or other classes of preferred stock;
- * Super majority of independent directors on the Board;
- * Executive compensation heavily weighted towards performance;
- No super majority stockholder approval for mergers or other business combinations in our bylaws or charter;
- * A policy prohibiting executive officers and directors from hedging or pledging Company stock;
- * Age-based Board tenure/refreshment guidelines; and
- * Board, CEO and executive officer stock ownership requirements.

Importantly, the Board has implemented our governance approach with the full support and recommendation of senior management. These governance practices do not result from any stockholder proposals related to them. Rather, they reflect the commitment of the Board and management to maintain common sense and industry-leading governance practices and policies to go along with our strong historical financial performance. The independent director composition of our proposed slate of Board nominees consists of 29% female directors and over 40% directors who meet diversity qualification. The proposed slate is 88% independent, with only our CEO serving as an inside director.

In addition to a diverse background of experiences, the Board believes it is extremely important to have a <u>balance of</u> independent service on the Board, with a mix of new

(0-5 years), mid-term (5-10 years) and long-term (more than 10 years) tenures participating. This blend of fresh perspectives and seasoned experience provides the right mix for effective Board oversight for today's modern multinational public company. Our financial performance over the past decade is proof that our stockholders have benefited from having a Board with a strong history of refreshment coupled with tenured members in each of these categories. Given the recent impacts to the global economy related to COVID-19, we believe that it is imperative to have all three categories of tenure on the Board. In general the Board seeks to have the greatest weight towards the new and mid-term categories (which may vary from time to time), which is reflected in the composition of our proposed slate of independent directors:

New Members (five years or less):	50%
Mid-Term Members (five to ten years):	25%
Long-Term Members (more than ten years):	25%

Coherent has also undertaken several less publicized sustainability initiatives, such as the installation of over 1,200 solar panels on our corporate headquarter building in California. This array produces over 400kW of energy per hour and approximately 625,000kW hours annually, significantly improving our headquarter's energy efficiency and reducing our greenhouse gas emissions by approximately 460 tons per year. This installation also allowed us to provide eight electric vehicle charging stations for our employees. Anecdotally, we have seen a significant increase in hybrid and electric powered vehicles in our Northern California employee base. Our most important environmental-related initiative, however, has been our energy-efficient product designs, which over the years have significantly reduced the amount of power and consumable materials needed to operate our products.

While much has been debated about requiring public companies to disclose their "political spending," as we have voluntarily disclosed for several years, we had no such corporate spending in 2020.

Our Board, management and employees take great pride in our financial performance, governance, stockholder relations and global corporate citizenship.

Recent Governance Changes

On and effective as of January 18, 2021, the Board amended and restated our bylaws to designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain proceedings relating to Coherent. We believe that having such court, located in our jurisdiction of incorporation, provides full access to the judicial process for our stockholders for such claims, but at the same time reducing cost to the

company of having to address claims in multiple jurisdictions. Ultimately, such additional costs are borne by the company and stockholders as a whole.

If we hold an annual meeting in 2022, we intend to ask stockholders to approve the exclusive forum provision in our bylaws.

PROPOSAL ONE ELECTION OF DIRECTORS

Nominees

Eight (8) members of the Board are to be elected at the Annual Meeting, all of whom are standing for re-election. Unless otherwise instructed, the proxy holders will vote the proxies received by them for the nominees named below. Each nominee has consented to be named a nominee in the proxy statement and to continue to serve as a director, if elected. If any nominee becomes unable or declines to serve as a director, if additional persons are nominated at the meeting or if stockholders are entitled to cumulate votes, the proxy holders intend to vote all proxies received by them in such a manner (in accordance with cumulative voting) as will ensure the election of as many of the nominees listed below as possible, and the specific nominees to be voted for will be determined by the proxy holders.

We are not aware of any reason that any nominee will be unable or will decline to serve as a director. The term of office of each person elected as a director will continue until our next annual meeting of stockholders or until a successor has been elected and qualified or until his or her earlier resignation or removal. There are no arrangements or understandings between any director or executive officer and any other person pursuant to which he or she is or was to be selected as a director or officer.

The names of the nominees, all of whom are currently directors, and certain information about them as of March 19, 2021 is set forth below. All of the nominees have been unanimously recommended for nomination by the Board acting on the unanimous recommendation of the Governance and Nominating Committee of the Board. The committee consists solely of independent members of the Board. There are no family relationships among directors or executive officers of Coherent. Except as set forth in "Biographical Information" below, each of our directors has been engaged in his or her principal occupation set forth in the table below during the past five years.

Name	Age	Director Since	Principal Occupation
Jay T. Flatley ⁽¹⁾⁽²⁾	68	2011	Chairman of the Board of Illumina, Inc.
Pamela Fletcher ⁽²⁾	54	2017	Vice President—Global Innovation at General Motors Company
Andreas ("Andy") W. Mattes	59	2020	President and Chief Executive Officer
Beverly Kay Matthews ⁽³⁾	62	2019	Retired Partner, Ernst & Young
Michael R. McMullen ⁽²⁾	60	2018	President and Chief Executive Officer of Agilent Technologies, Inc.
Garry W. Rogerson ⁽¹⁾⁽³⁾	68	2004	Former Chief Executive Officer of Advanced Energy Industries, Inc.
Steve Skaggs ⁽¹⁾⁽³⁾	58	2013	Former Senior Vice President and Chief Financial Officer of Atmel Corporation
Sandeep Vij ⁽²⁾	55	2004	Former President and Chief Executive Officer of MIPS Technologies, Inc.

- (1) Member of the Governance and Nominating Committee.
- (2) Member of the Compensation and HR Committee.
- (3) Member of the Audit Committee.

Biographical Information

Jay T. Flatley. Since 1999 Mr. Flatley has served as a member of the Board of Directors of Illumina, Inc., a leading developer, manufacturer and marketer of life science tools and integrated systems for the analysis of genetic variation and function and from July 2016 to December 2019, as Illumina's Executive Chairman of the Board of Directors. Since January 2020, he has served as Chairman of the Board of Directors of Illumina. From January 2016 to July 2016, he also served as Illumina's Chairman of the Board of Directors. From 1999 until July 2016, Mr. Flatley was Illumina's Chief Executive Officer. From 1999 to December 2013, Mr. Flatley also served as Illumina's President. Prior to joining Illumina, Mr. Flatley was President, Chief Executive Officer, and a member of the Board of Directors of Molecular Dynamics, Inc., a Nasdag listed life sciences company focused on genetic discovery and analysis, from 1994 until its sale to Amersham Pharmacia Biotech Inc. in 1998. Additionally, he was a co-founder of Molecular Dynamics and served in various other positions there from 1987 to 1994. Mr. Flatley is also a member of the board of directors of Denali Therapeutics Inc., a biopharmaceutical company. Mr. Flatley previously served on the board of directors of Juno Therapeutics, Inc., a biopharmaceutical company. Mr. Flatley holds a B.A. in Economics from Claremont McKenna College and a B.S. and a M.S. in Industrial Engineering from Stanford University.

Mr. Flatley's years of executive and management experience in the high technology industry, including serving as the chief executive officer of several public companies, his service on the boards of other publicly held companies, and his years of service as a director of Coherent make him an invaluable member of the Board.

Pamela Fletcher. Ms. Fletcher has served as Vice President—Global Innovation at General Motors Company ("GM"), a global automotive company, since October 2018 and was previously Vice President-Global Innovation and R&D Laboratories at GM from January 2019 to February 2020 (for R&D Laboratories). Over a fifteen-plus year career with GM, Ms. Fletcher has served in various roles, including Vice President—Global Electric Vehicle Programs from October 2017 to October 2018; Global Executive Chief Engineer, Autonomous and Electrified Vehicles and New Technology from July 2016 to October 2017; Executive Chief Engineer, Electrified Vehicles from August 2012 to July 2016; Chief Engineer, Chevrolet Volt Propulsion System from 2009 to August 2012; and Assistant Chief Engineer, Hybrid & Electric Propulsion Systems from 2007 to 2008. She holds a B.S. in Engineering from Kettering University and an M.S. in Engineering from Wayne State University.

Ms. Fletcher's years of executive and management experience in the automotive industry, her knowledge of advanced and emerging automotive technologies, and her years of service as a director of Coherent make her an invaluable member of the Board.

Andy Mattes. Mr. Mattes has served as our Chief Executive Officer and President as well as a member of the Board since April 2020. Prior to joining Coherent and beginning in June 2019, he was a Senior Advisor to McKinsey & Company, a leading global management consulting firm, providing corporate and strategic consulting services to various clients of the firm. From January 2018 to May 2019, he was an independent corporate advisor. From 2013 to December 2017, he was the Chief Executive Officer and a member of the board of directors of Diebold Nixdorf Incorporated, a retail and financial services technology systems company. He also served as its President from 2013 to August 2016. Mr. Mattes was the Senior Vice President, Global Strategic Partnerships at Violin Memory, a computer storage systems company, in 2013. He has also held various senior management positions with Hewlett-Packard Co., a computer technologies company. From 2008 to 2011 he was the Senior Vice President and General Manager of Hewlett Packard's Enterprise Services for the Americas. From 2006 to 2008 he was Hewlett Packard's Chief Sales Officer for the Enterprise Business. Mr. Mattes spent the first 20 years of his career (between 1985 and 2005) at Siemens, holding a variety of senior leadership positions. These culminated in his role as chief executive officer of Siemens Communications Inc., USA, in Boca Raton, Florida. He received his Diplom-Kaufmann in business administration from Ludwig Maximilian University.

Mr. Mattes' decades of experience developing and executing business strategies, his prior executive service in public companies, his extensive international experience, his recent appointment as our President and Chief Executive Officer, and his previous service on the board of another publicly held company make him an invaluable member of the Board.

Beverly Kay Matthews. Ms. Matthews is a certified public accountant (Texas) and retired from Ernst & Young, LLP ("EY"), a global accounting firm, in June 2019, where she served as Vice Chair and Managing Partner of the West Region since 2008. She joined EY in 1983 and held a number of leadership positions, including Chief Operating Officer and Managing Partner of the Americas' Assurance and Advisory Business Services from 2005 to 2008; Managing Partner of the Assurance Practice of the Gulf Coast Region from 2001 to 2005; Managing Partner of the Austin Office from 1998 to 2001;

and served as an audit partner for privately and publicly held companies in the technology, transportation and healthcare industries. She is also a member of the board of directors and audit and compensation committees of SVB Financial Group, the parent company of Silicon Valley Bank, a member of the board of directors and audit committee of Main Street Capital Corporation, and a member of the Texas Tech University Jerry S. Rawls College of Business Advisory Council. Ms. Matthews holds a Bachelors of Business Administration in Accounting from Texas Tech University.

Ms. Matthews' years in the public accounting industry working with public companies in the technology, transportation and healthcare industries, as well as her service on the boards of other publicly held companies, make her an invaluable member of the Board.

Michael R. McMullen. Mr. McMullen has served as Chief Executive Officer of Agilent Technologies, Inc. ("Agilent"), a global leader in Life Sciences and Diagnostics, since March 2015 and as President of Agilent since September 2014. From September 2014 to March 2015, he also served as Agilent's Chief Operating Officer. From September 2009 to September 2014, he served as Senior Vice President, Agilent and President, Chemical Analysis Group at Agilent. From January 2002 to September 2009, he served as Agilent's Vice President and General Manager of the Chemical Analysis Solutions Unit of the Life Sciences and Chemical Analysis Group. Prior to assuming this position, from March 1999 to December 2001, Mr. McMullen served as Country Manager for Agilent's China, Japan and Korea Life Sciences and Chemical Analysis Group. Prior to this position, Mr. McMullen served as the Controller for the Hewlett-Packard Company and Yokogawa Electric Joint Venture from July 1996 to March 1999. Mr. McMullen is also a member of the board of directors of Agilent. Mr. McMullen holds a bachelor's degree in economics and business administration from the University of Delaware and an MBA from the Wharton School of Business.

Mr. McMullen's years of executive and management experience in the high technology industry, including serving as the chief executive officer and on the board of another publicly held company, make him an invaluable member of the Board.

Garry W. Rogerson. Mr. Rogerson has served as Coherent's Chairman of the Board since June 2007. Since September 2015, Mr. Rogerson has been a private investor. From August 2011 to September 2015, Mr. Rogerson was Chief Executive Officer and a member of the Board of Directors of Advanced Energy Industries, Inc., a provider of power and control technologies for thin film manufacturing and solar-power generation, after which he agreed to serve as a

special advisor for a period of time. He was Chairman and Chief Executive Officer of Varian, Inc., a major supplier of scientific instruments and consumable laboratory supplies, vacuum products and services, from February 2009 and 2004, respectively, until the purchase of Varian by Agilent Technologies, Inc. in May 2010. Mr. Rogerson served as Varian's Chief Operating Officer from 2002 to 2004, as Senior Vice President, Scientific Instruments from 2001 to 2002, and as Vice President, Analytical Instruments from 1999 to 2001. Mr. Rogerson received an honours degree and Ph.D. in biochemistry as well as an honorary doctoral science degree from the University of Kent at Canterbury.

Mr. Rogerson's years of executive and management experience in the high technology industry, including serving as the chief executive officer of several public companies, his service on the boards of other publicly held companies, and his years of service as a director of Coherent make him an invaluable member of the Board.

Steve Skaggs. Mr. Skaggs has been a private investor since April 2016. He currently also serves as a member of the board of directors and chair of the audit committee of IDEX Biometrics, ASA. From May 2013 to April 2016, Mr. Skaggs was Senior Vice President and Chief Financial Officer of Atmel Corporation, a leading supplier of microcontrollers, until its acquisition by Microchip Technology Incorporated. Mr. Skaggs has more than 25 years of experience in the semiconductor industry, including serving as President, Chief Executive Officer and Chief Financial Officer of Lattice Semiconductor, a supplier of programmable logic devices and related software. He was also previously a member of the board of directors of Lattice. Prior to Lattice, Mr. Skaggs was employed by Bain & Company, a global management consulting firm, where he specialized in high technology product strategy, mergers and acquisitions and corporate restructurings. Mr. Skaggs holds an MBA degree from the Harvard Business School and a B.S. degree in Chemical Engineering from the University of California, Berkeley.

Mr. Skaggs' years of executive and management experience in the high technology industry, including serving as the chief executive officer and chief financial officer of other public companies, his prior service on the board of another publicly held company and his years of service as a director of Coherent make him an invaluable member of the Board.

Sandeep Vij. Mr. Vij has been a private investor since February 2013. Previously, he held the position of President and Chief Executive Officer and was a member of the board of directors of MIPS Technologies, Inc., a leading provider of processor architectures and cores, from January 2010 until its

sale in February 2013. In addition, Mr. Vij had been the Vice President and General Manager of the Broadband and Consumer Division of Cavium Networks, Inc., a provider of highly integrated semiconductor products from May 2008 to January 2010. Prior to that, he held the position of Vice President of Worldwide Marketing, Services and Support for Xilinx Inc., a digital programmable logic device provider, from 2007 to April 2008. From 2001 to 2006, he held the position of Vice President of Worldwide Marketing at Xilinx. From 1997 to 2001, he served as Vice President and General Manager of the General Products Division at Xilinx. Mr. Vij joined Xilinx in 1996

as Director of FPGA Marketing. He is a graduate of General Electric's Edison Engineering Program and Advanced Courses in Engineering. He holds an MSEE from Stanford University and a BSEE from San Jose State University.

Mr. Vij's years of executive and management experience in the high technology industry, including serving as the chief executive officer of another public company, his service on the board of another publicly held company, and his years of service as a director of Coherent make him an invaluable member of the Board.

Director Independence

The Board has determined that, with the exception of Mr. Mattes, all of its current members and all of the nominees for director are "independent directors" as that term is defined in the listing rules of the Nasdaq Stock Market.

Board Meetings and Committees

The Board held a total of eleven (11) formal meetings and acted two (2) times by unanimous written consent during fiscal 2020. Additionally, from time to time between formal meetings, members of the Board participate in update or status telephone calls and briefings, which are not included in these totals. During fiscal 2020, the Board had three standing committees: the Audit Committee; the Compensation and HR Committee; and the Governance and Nominating Committee. From time to time, the Board may create, and has in the past created, limited ad hoc committees, service on which does not provide additional compensation. Currently, as discussed below, the Board has one ad hoc committee, the Equity Committee, which is designated and overseen by the Compensation and HR Committee. Each of our directors attended at least 75% of the meetings of the Board and the committees on which he or she served during fiscal 2020.

Audit Committee

The Audit Committee consists of directors Skaggs (Chair), Matthews and Rogerson. The Audit Committee held ten (10) meetings during fiscal 2020. Susan James also served on the committee during fiscal 2020 until her retirement from the Board on April 27, 2020. The Board has determined that directors Skaggs, Matthews and Rogerson are "audit committee financial experts" as that term is defined in the rules of the SEC. Among other things, the Audit Committee has the sole authority for appointing and supervising our independent registered public accounting firm and is primarily

responsible for approving the services performed by our independent registered public accounting firm and for reviewing and evaluating our accounting principles and our system of internal accounting controls.

Compensation and HR Committee

The Compensation and HR Committee consists of directors Vij (Chair), Flatley, Fletcher and McMullen. Compensation and HR Committee held eight (8) meetings during fiscal 2020. As noted above, all of the members of the Compensation and HR Committee are "independent" as defined under the listing rules of the Nasdag Stock Market. The Compensation and HR Committee, among other things, reviews and approves our executive compensation policies and programs and makes equity grants to employees, including officers, pursuant to our equity plan. In fiscal 2020, this committee had the sole authority delegated to it by the Board to make equity grants to employees of the company serving at a level of vice president and above. On September 27, 2018, the Board, at the recommendation of the Compensation and HR Committee, designated an Equity Committee with authority to make grants of restricted stock units, within guidelines recommended by the Compensation and HR Committee, to individuals who are employees serving at a level below that of vice president. The Equity Committee is composed of our CEO, in his capacity as a member of the Board. The Equity Committee reports to the Compensation and HR Committee periodically and upon request of the Compensation and HR Committee. The Equity Committee's designated authority was first effective for fiscal 2019 and is concurrent with and does not supersede the authority of the Compensation and HR Committee. For additional information about the Compensation and HR Committee's processes and procedures for the consideration and determination of executive compensation, see "Compensation Discussion and Analysis."

Governance and Nominating Committee

The Governance and Nominating Committee consists of directors Rogerson (Chair), Flatley and Skaggs. The Governance and Nominating Committee held five (5) meetings during fiscal 2020. Susan James also served on the committee during fiscal 2020 until her retirement from the Board on April 27, 2020. The Governance and Nominating

Committee, among other things, assists the Board by making recommendations to the Board on matters concerning director nominations and elections, board committees and corporate governance, allocation of risk oversight amongst the Board and its committees and compensation for directors. For fiscal 2020, the committee retained an independent compensation consultant to advise it on compensation for service on the Board. Additionally, the committee led the search process for our new chief executive officer and retained a search consultant to assist in such search.

Copies of the charters for each committee of the Board may be found on the investor relations section of our website (investors.coherent.com) under "Corporate Governance"/ "Governance Documents."

Attendance at Annual Meeting of Stockholders by the Members of the Board of Directors

Although we do not have a formal policy regarding attendance by members of the Board at our annual meeting of stockholders, directors are encouraged, but not required, to attend. Seven of our eight then-current members of the Board attended our annual meeting held on April 27, 2020.

Process for Stockholders to Recommend Candidates for Election to the Board of Directors

The Governance and Nominating Committee will consider nominees properly recommended by stockholders. A stockholder that desires to recommend a candidate for election to the Board must direct the recommendation in writing to us at our principal executive offices (Attention: Corporate Secretary) and must include the candidate's name, age, home and business contact information, principal occupation or employment, the number of shares beneficially owned by the nominee and the stockholder making the recommendation, whether any hedging transactions have been entered into by the nominee or on his or her behalf, information regarding any arrangements or understandings between the nominee and the stockholder nominating the nominee or any other persons relating to the nomination, a written statement by the nominee acknowledging that the nominee will owe a fiduciary duty to Coherent if elected, a written statement of the nominee that such nominee. if elected, intends to tender, promptly following such nominee's election or re-election, an irrevocable resignation effective upon such nominee's failure to receive the required vote for re-election at the next meeting at which such nominee would face re-election and upon acceptance of such resignation by the Board in accordance with Coherent's guidelines or policies, and any other information required to be disclosed about the nominee if proxies were to be solicited to elect the nominee as a director.

For a stockholder recommendation to be considered by the Governance and Nominating Committee as a potential candidate at a meeting of stockholders, nominations must be received on or before the deadline for receipt of stockholder proposals for such meeting. In the event a stockholder decides to nominate a candidate for director and solicits proxies for such candidate, the stockholder will need to follow the rules set forth by the SEC and in our bylaws. See "General Information About the Meeting—Deadline for Receipt of Stockholder Proposals or Nominations; Proxy Access."

The Governance and Nominating Committee's criteria and process for evaluating and identifying the candidates that it approves as director nominees are as follows:

- The Governance and Nominating Committee regularly reviews the current composition and size of the Board;
- The Governance and Nominating Committee reviews the qualifications of any candidates who have been properly recommended by a stockholder, as well as those candidates who have been identified by management, individual members of the Board or, if the Governance and Nominating Committee determines, a search firm. Such review may, in the Governance and Nominating Committee's discretion, include a review solely of information provided to the Governance and Nominating Committee or may also include discussions with persons familiar with the candidate, an interview with the candidate or other actions that the committee deems proper;
- The Governance and Nominating Committee evaluates the performance of the Board as a whole and evaluates the qualifications of individual members of the Board eligible for re-election at the annual meeting of stockholders;
- The Governance and Nominating Committee considers the suitability of each candidate, including the current members of the Board, in light of the current size and composition of the Board. Except as may be required by rules promulgated by the Nasdag Stock Market or the SEC, it is the current belief of the Governance and Nominating Committee that there are no specific, minimum qualifications that must be met by any candidate for the Board, nor are there specific qualities or skills that are necessary for one or more of the members of the Board to possess. In evaluating the qualifications of the candidates, the Governance and Nominating Committee considers many factors, including, issues of character, judgment, independence, age, expertise, diversity of experience, length of service, other commitments and the like. While Coherent does not have a formal policy with regard to the consideration of diversity in

identifying director nominees, as noted above, diversity of experience is one of many factors that the committee considers;

- The Governance and Nominating Committee considers each individual candidate in the context of the current perceived needs of the Board as a whole. While the Governance and Nominating Committee has not established specific minimum qualifications for director candidates, the committee believes that candidates and nominees must reflect a Board that is comprised of directors who (i) are predominantly independent, (ii) are of high integrity, (iii) have qualifications that will increase the overall effectiveness of the Board, and (iv) meet other requirements as may be required by applicable rules, such as financial literacy or financial expertise with respect to audit committee members;
- In evaluating and identifying candidates, the Governance and Nominating Committee has the authority to retain and terminate any third party search firm that is used to identify director candidates and has the authority to approve the fees and retention terms of any search firm; and
- After such review and consideration, the Governance and Nominating Committee recommends the slate of director nominees to the full Board for its approval.

The Governance and Nominating Committee will endeavor to notify, or cause to be notified, all director candidates, including those recommended by a stockholder, of its decision as to whether to nominate such individual for election to the Board.

Our corporate governance guidelines require that upon a member of the Board turning 72 years old, he or she shall submit a conditional resignation to the Governance and Nominating Committee effective upon the next annual meeting of stockholders. The committee then determines whether to recommend that the Board accept such resignation.

Majority Voting and Conditional Resignations from the Board of Directors

Since 2013, we have had a majority vote standard for the election of directors in elections that are not Contested Elections (as defined below). This means that a nominee for director in an uncontested election such as this one shall be elected to the Board if the votes cast "for" such nominee exceed the votes cast "against" such nominee (with abstentions and broker non-votes not counted as a vote cast either "for" or "against" that director's election). However, if the number of nominees exceeds the number of directors to be elected (a "Contested Election"), our bylaws provide that directors shall be elected by a plurality of the votes cast.

The Board has also adopted a policy on majority voting to (i) establish procedures under which any incumbent director

who fails to receive a majority of the votes cast in an election that is not a Contested Election shall tender his or her resignation to the Governance and Nominating Committee for consideration; and (ii) provide that the Governance and Nominating Committee will make recommendations to the Board regarding the actions to be taken with respect to all such offers to resign. The Board shall act on the resignation within 90 days following certification of the election results. In the event that the Board does not accept such resignation, then such director shall continue to serve until such time as his or her successor is elected.

Stockholder Communication with the Board of Directors

While the Board believes that management speaks for Coherent, the Board encourages direct communication from stockholders. Accordingly, any stockholder may contact any member of the Board individually or as a group by writing by mail to our principal executive offices (c/o Corporate Secretary) at 5100 Patrick Henry Dr., Santa Clara, CA 95054.

Any stockholder may report to us any complaints or comments regarding accounting, internal accounting controls, or auditing matters. Any stockholder who wishes to so contact us should send such complaints or comments to the Audit Committee, c/o Corporate Secretary, at our principal executive offices. Additionally, as noted below, our Compensation and HR Committee encourages stockholder communication on matters related to executive compensation.

Any stockholder communications that the Board receives will first go to our Corporate Secretary, who will log the date of

receipt of the communication as well as the identity and contact information of the correspondent in our stockholder communications log.

Our Corporate Secretary will review, summarize and, if appropriate, investigate the complaint under the direction of the Board or appropriate committee of the Board in a timely manner. In the case of accounting or auditing related matters, a member of the Audit Committee, or the Audit Committee as a whole, will then review the summary of the communication, the results of the investigation, if any, and, if appropriate, the draft response. The summary and response will be in the form of a memo, which will become part of the stockholder communications log that the Corporate Secretary maintains with respect to all stockholder communications.

Independent Chair and Board Leadership

The Board's leadership structure consists of an independent Board Chair, who is elected by the independent directors, and independent committee chairs. We separate the positions of Chief Executive Officer ("CEO") and Board Chair in recognition of the differences between the two roles. The Board believes this structure provides independent Board leadership and engagement.

Given that our Chair is an independent director, the Board does not feel the need for a separate "lead independent director," as our independent Chair performs that function. The Board takes its independence seriously and reinforces this standard with seven of the eight director nominees, or 88%, being independent.

The Role of the Board and Its Committees in Risk Oversight

The Board oversees Coherent's risk profile and management's processes for assessing and managing risk, both as a Board and through its committees, with the Governance and Nominating Committee delegated the responsibility for assigning oversight responsibilities to each committee and the Board as a whole. Our senior executive team provides regular updates to the Board and each committee regarding our strategies and objectives and the risks inherent with them.

Each regular meeting of the Board includes a discussion of risks related to the Company's financial results and operations and each committee schedules risk-related presentations regularly throughout the year. In addition, our directors have access to our management to discuss any matters of interest, including those related to risk. Those members of management most knowledgeable of the issues attend Board and committee meetings to provide additional insight on the matters being discussed, including risk exposures. Our Chief Financial Officer and Chief Legal Officer both report directly to our CEO, providing him with further visibility to our risk profile. A Corporate Vice President of Finance is the designated officer overseeing our enterprise risk management program and works closely with both our Chief Financial Officer and Chief Legal Officer on these matters.

These regular meetings also provide our Board members the opportunity to discuss issues of concern directly with

management. In general, the Board and its committees oversee the following risk categories:

- The Board generally oversees the Company's overall enterprise risk management process and specifically with regard to the areas of strategy, mergers and acquisitions, communications and operations;
- The Audit Committee generally oversees risks primarily related to financial controls, IT, accounting, tax, treasury, capital, legal, regulatory and compliance;
- The Compensation and HR Committee generally oversees our compensation programs so that they do not incentivize excessive risk taking as well as overseeing human resources related risks; and
- The Governance and Nominating Committee oversees the assignment of risk oversight categories by each particular committee and/or the Board as a whole, as well as those risks related to compensation of members of the Board and succession planning for the Board and our CEO.

Management presents an annual assessment of the risks associated with the Company's compensation plans. The Compensation and HR Committee agreed with the conclusion from the first quarter of fiscal 2021 presentation that the risks were within our ability to effectively monitor and manage and that these risks are not reasonably likely to have a material adverse effect on the Company.

Hedging Policy

The Board (acting on the recommendation of the Audit Committee) has approved the Company's Insider Trading Policy (the "Policy"), which applies to all directors, officers and employees of the Company. The Policy includes the following restrictions:

- A prohibition against "short sales" (i.e., the sale of a security that must be borrowed to make delivery) and "selling short against the box" (i.e., a sale with a delayed delivery) with respect to Company securities by any director, officer or employee of the Company;
- A prohibition against any director, officer or employee of the Company engaging in transactions in publicly traded options, such as puts and calls, and other derivative

- securities with respect to the Company's securities. This prohibition extends to any hedging or similar transaction designed to decrease the risks associated with holding Company securities;
- A prohibition against pledging Company securities as collateral for loans by any director, officer or employee of the Company who is subject to (1) the reporting requirements of Section 16 of the Exchange Act or (2) the Company's blackout periods or pre-clearance requirements under the Policy (a "designated insider"); and
- A prohibition against holding Company securities in margin accounts by any director, officer or employee of the Company who is a designated insider.

Additional Board Governance Matters

The Board (acting on the recommendation of the Governance and Nominating Committee) has approved the Company's Corporate Governance Guidelines, which include, among other items (in addition to those items described elsewhere in this proxy statement), the following provisions:

- At each regular meeting of the Board, the independent directors also meet in executive session without the presence of management;
- To avoid "over-boarding" we maintain the following limits on service on other boards:
 - CEO—No more than one (1) other public company board of directors in addition to the Company (note, however, that Mr. Mattes does not currently serve on any public company boards other than ours);
 - Independent Directors—No more than four (4) other public company boards of directors in addition to the Company;

- Audit Committee members—No more than three
 (3) other public company audit committees in addition to the Company, unless the other independent directors consent;
- Each independent member of the Board must, within five years of initial appointment, acquire and thereafter maintain a minimum value of Company stock equal to three times such director's annual Board cash retainer (exclusive of any cash retainer for service as chair or committee service);
- The Board is responsible for reviewing the Company's succession planning and senior management development on an annual basis; and
- The Board maintains an age-based term limit of 72 (provided, that the Governance and Nominating Committee maintains the flexibility to not apply such limit on a facts and circumstances basis).

Fiscal 2020 Director Compensation

During fiscal 2020, we paid our non-employee directors an annual cash retainer (depending upon position) for service on the Board as follows:

Position	Annual Re	etainer
Board Member	\$	60,000
Board Chair	\$	60,000
Audit Committee Chair	\$	34,000
Compensation and HR Committee Chair	\$	20,000
Governance and Nominating Committee Chair	\$	13,500
Audit Committee member (non-Chair)	\$	12,500
Compensation and HR Committee member (non-Chair)	\$	10,000
Governance and Nominating Committee member (non-Chair)	\$	6,500

The Governance and Nominating Committee annually reviews Board and committee compensation with the assistance of an independent compensation consultant, which for fiscal 2020 was Compensia. Compensia is separately compensated for this work from the work it does as the Compensation and HR Committee's independent consultant for executive compensation. The annual review includes a comparison to peer companies (which are the same as used for executive compensation as noted in "Compensation Discussion and Analysis") and market pay practices for service on boards of directors. Compensia advised the

committee that the design and pay levels of the director compensation program were aligned with peer market practices. As noted, the Board is compensated with a combination of cash retainers and a fixed value of time-based RSUs. As noted elsewhere in this proxy statement, Compensia has not provided any other service for the Company other than as directed by a committee of the Board. Despite the significant increase in Board meetings during fiscal 2020 and the beginning of fiscal 2021, the Board has not had a corresponding increase in compensation.

Following the recommendation of the Governance and Nominating Committee (based upon review by Compensia) in February 2017, the Board adopted resolutions automatically granting each year without any discretion to each non-employee director an award of RSUs (rounded down to the nearest whole share) valued at \$225,000 (based on the trailing thirty day closing price of the Company's common stock on the Nasdaq Stock Market measured from the last trading day prior to the date of grant) upon the director's election to the Board at the Company's annual meeting. In addition, the Board determined that upon the initial

appointment of a non-employee director, such director will receive an award of RSUs valued at \$225,000 (based on the trailing thirty day closing price of the Company's common stock on the Nasdaq Stock Market measured from the last trading day prior to the date of grant), which RSUs shall vest over two years (fifty percent on each anniversary of the date of grant). Such awards of RSUs are currently granted under the Coherent Equity Incentive Plan. Prior to the approval of the Coherent Equity Incentive Plan by our stockholders in April 2020, these awards of RSUs were made under the 2011 Equity Incentive Plan.

The chart below presents information concerning the total compensation of our non-employee directors for service (including the Board and, where applicable, committee service) during fiscal 2020:

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾⁽³⁾	Option Awards (\$) ⁽⁴⁾	Total (\$)
Jay T. Flatley	76,500	269,724	_	346,224
Pamela Fletcher	70,000	269,724	_	339,724
Susan M. James*	64,625	_	_	64,625
Beverly Kay Matthews	72,500	269,724	_	342,224
Michael R. McMullen	70,000	269,724	_	339,724
Garry W. Rogerson	146,000	269,724	_	415,724
Steve Skaggs	95,125	269,724	_	364,849
Sandeep Vij	80,000	269,724	_	349,724

- * Fees paid in cash to Ms. James reflect the pro-rata amount for her service during the fiscal year. Ms. James retired from the Board effective as of April 27, 2020.
- (1) The chart below summarizes the gross cash amounts earned by non-employee directors for service during fiscal 2020 on the Board and its committees:

Name	Annual Board Service (\$)	Audit Committee (\$)	Compensation and HR Committee (\$)	Governance and Nominating Committee (\$)	Total (\$)
Jay T. Flatley	60,000	_	10,000	6,500	76,500
Pamela Fletcher	60,000		10,000	_	70,000
Susan M. James*	45,000†	14,750†	_	4,875†	64,625
Beverly Kay Matthews	60,000	12,500	_	_	72,500
Michael R. McMullen	60,000	_	10,000	_	70,000
Garry W. Rogerson	120,000	12,500	_	13,500	146,000
Steve Skaggs	60,000	28,625†	_	6,500	95,125
Sandeep Vij	60,000	_	20,000	_	80,000

- * Retainer amounts for Ms. James are pro-rata for her service during the fiscal year. Ms. James retired from the Board effective as of April 27, 2020.
- † Reflects pro-rata amounts for service on the Board and the respective committee during the year; the applicable individual did not serve on the applicable committee for the entire fiscal year. In the case of Mr. Skaggs, he was appointed Chair of the Audit Committee in December 2019.
- (2) These amounts do not reflect compensation actually received. Rather, these amounts represent the aggregate grant date fair value computed in accordance with ASC 718, for restricted stock units ("RSUs") which were granted in fiscal 2020. The assumptions used to calculate the value of these RSUs are set forth in Note 12 "Employee Stock Award and Benefit Plans"

Proposal One Election of Directors

of the Notes to the Consolidated Financial Statements in our annual report on Form 10-K for fiscal 2020, filed with the SEC on December 1, 2020.

(3) The aggregate number of shares underlying unvested RSUs held by each of our non-employee directors as of the end of fiscal 2020 (including the grants made to our non-employee directors during fiscal 2020) was as follows:

Name	Shares ^(a)
Jay T. Flatley	2,148 ^(b)
Pamela Fletcher	2,148 ^(b)
Susan M. James	_
Beverly Kay Matthews	2,898 ^(c)
Michael R. McMullen	2,148 ^(b)
Garry W. Rogerson	2,148 ^(b)
Steve Skaggs	2,148 ^(b)
Sandeep Vij	2,148 ^(b)

- (a) The shares underlying the RSUs will vest to the extent an individual is a member of the Board on the applicable vesting date.
- (b) These shares vested on February 15, 2021.
- (c) 2,148 shares vested on February 15, 2021, and 750 shares are scheduled to vest on May 9, 2021.
- (4) No stock options have been granted to our non-employee directors since 2011. As of the end of fiscal 2020, none of our non-employee directors held any stock options.

Option Exercises and Stock Vested During Fiscal 2020

The table below sets forth certain information for each non-employee director regarding the exercise of options and the vesting of stock awards during fiscal 2020, including the aggregate value realized upon such exercise or vesting.

	Option A	wards	Stock Av	vards
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$) ⁽¹⁾	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) ⁽²⁾
Jay T. Flatley	24,000	1,468,560	1,805	277,627
Pamela Fletcher	<u> </u>	_	1,805	277,627
Susan M. James	_	_	1,805	277,627
Beverly Kay Matthews	_	_	750	105,150
Michael R. McMullen	_	_	2,422	345,386
Garry W. Rogerson	_	_	1,805	277,627
Steve Skaggs	_	_	1,805	277,627
Sandeep Vij	_	_	1,805	277,627

- (1) Reflects the difference between the exercise price of the option and market price of our common stock on the exercise date.
- (2) Reflects the market price of our common stock on the vesting date or the last day on which our common stock traded prior to the vesting date if trading did not occur on the vesting date.

Vote Required

The affirmative vote of a majority of the votes cast is required for the election of directors. You may vote "FOR," "AGAINST" or "ABSTAIN" with respect to each of the director nominees named in this proxy statement. Pursuant to our bylaws, abstentions and broker non-votes are not considered to be votes cast with respect to the election of directors and, therefore, will not have an effect in determining the outcome of the election of directors. If a quorum is present, each of the eight (8) nominees who receives more "FOR" votes than "AGAINST" votes will be elected.

Every stockholder voting for the election of directors may cumulate such stockholder's votes and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which the stockholder's shares are entitled. Alternatively, a stockholder may distribute his or her votes on the same principle among as many candidates as the stockholder thinks fit, provided that votes

cannot be cast for more than eight (8) candidates. However, no stockholder will be entitled to cumulate votes for a candidate unless (i) such candidate's name has been properly placed in nomination for election at the Annual Meeting prior to the voting and (ii) the stockholder, or any other stockholder, has given notice at the meeting prior to the voting of the intention to cumulate the stockholder's votes. If cumulative voting occurs at the meeting and you do not specify how to distribute your votes, your proxy holders (the individuals named on your proxy card) will cumulate votes in such a manner as will ensure the election of as many of the nominees listed above as possible, and the specific nominees to be voted for will be determined by the proxy holders.

Recommendation

The Board recommends that stockholders vote "FOR" each of the eight nominees presented herein.

PROPOSAL TWO

APPROVAL OF OUR AMENDED AND RESTATED EMPLOYEE STOCK PURCHASE PLAN

General

We are asking stockholders to approve our amended and restated Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan was initially adopted in 1980 and has been amended several times, most recently in 2012 to increase the number of shares reserved for issuance thereunder (the "Existing Plan"). Following the unanimous recommendation of its Compensation and HR Committee, the Board has determined that it is in the best interests of the Company and its stockholders to amend and restate the Purchase Plan: (i) to authorize additional shares of our common stock for purchase under the Purchase Plan and (ii) to make certain administrative changes including permitting the Company to allow employees who may customarily work less than 20 hours per week to participate. The Board has authorized an increase to the number of shares reserved for issuance thereunder by an additional 250,000 shares to an aggregate of 337,192 shares of our common stock reserved for purchase under the Purchase Plan on or after May 6, 2021 subject to stockholder approval.

As of February 26, 2021, 87,192 shares remained available for issuance under the Existing Plan. The Board expects that with the 250,000 share increase, the number of shares reserved for issuance under the Purchase Plan will be sufficient to operate the plan for at least three years without having to request additional shares. The Board will periodically review actual share consumption under the Purchase Plan and may make an additional request for shares under the Purchase Plan earlier or later than this period as needed.

The Board believes that the Purchase Plan is helpful to the Company in attracting and retaining personnel and the Company's request for an additional 250,000 shares is reasonable and prudent and allows us to continue the Purchase Plan.

If the stockholders approve the Purchase Plan, it will replace the current version of the Existing Plan. If stockholders do not approve the amended and restated Purchase Plan, we will continue to use the current version of the Existing Plan.

Description of the Purchase Plan

The following is a summary of the principal features of the Purchase Plan and its operation. The summary is qualified in its entirety by reference to the Purchase Plan as set forth in Appendix A.

General

The Purchase Plan was adopted by the Board in March 2021, subject to stockholder approval at the Annual Meeting. The purpose of the Purchase Plan is to provide employees of the Company and its subsidiaries with an opportunity to purchase shares of our common stock through payroll deductions.

Eligibility

Each of our employees or the employees of our subsidiaries who is customarily employed with us or one of our subsidiaries for at least twenty hours per week (or such lesser number of hours determined by the Company) is eligible to participate in the Purchase Plan; except that no employee will be granted an option under the Purchase Plan to the extent that (i) immediately after the grant, such employee would own 5% or more of the total combined voting power or value of the Company, (ii) his or her rights to purchase stock under all of our employee stock purchase plans accrues at a rate which exceeds \$25,000 worth of stock (determined at the fair market value of the shares at the time such option is granted) for each calendar year, or (iii) the employee is an employee of a subsidiary that we have designated as not participating in the Purchase Plan. As of February 26, 2021, approximately 4,476 employees were eligible to participate in the Purchase Plan. Non-employee directors are not eligible to participate in the Purchase Plan.

Offering Period

The Purchase Plan is implemented through offering periods currently two offering periods during each fiscal year, each of six months duration, commencing on or about May 1 and November 1 of each year. To participate in the Purchase Plan, an eligible employee must complete a subscription agreement provided by the Company authorizing payroll deductions and submit such subscription agreement prior to the applicable offering date. Unless otherwise determined by the Company, payroll deductions may not exceed 10% of a participant's base pay which he or she received on a given payday nor be less than a \$10 deduction per payday. At the beginning of each offering period, each participant automatically is granted an option to purchase shares of our common stock through such participant's accumulated payroll deductions. Unless a participant withdraws from the Purchase Plan, the option will be automatically exercised at the end of the offering period, and the maximum number of full shares will be purchased at the applicable amount of the accumulated payroll deductions in his or her account.

Purchase Price

Shares of our common stock may be purchased under the Purchase Plan at a purchase price equal to 85% of the lesser of the fair market value of our common stock on (i) the first day of the offering period, or (ii) the last day of the offering period. The fair market value of our common stock on any relevant date will be determined by the Board in good faith.

Payroll Deductions

The purchase price of the shares is accumulated by payroll deductions throughout each offering period. The payroll deductions made by a participant will be credited to his or her account under the Purchase Plan. A participant may not make any additional payments into such account. The maximum number of full shares of our common stock that a participant may purchase in each offering period will be determined by dividing the total amount of payroll deductions withheld from the participant's compensation during that offering period by the purchase price, provided that in no event may a participant purchase during one offering period more than 10,000 shares.

A participant may lower but not increase the rate of his or her payroll deductions during an offering period by filing a new subscription agreement. Unless otherwise determined by the Company, the change in rate will be effective within 15 days following the Company's receipt of the new authorization.

Withdrawal

During the offering period, a participant may discontinue all, but not less than all, of the payroll deductions credited to his or her account at any time prior to the end of an applicable offering period by giving notice to the Company. All the participant's payroll deductions credited to his or her account will be paid promptly after receipt of a withdrawal notice and the option will terminated, and no further payroll deductions will be made during the applicable offering period.

In the event a participant fails to remain employed by the Company or any subsidiary customarily for at least 20 hours per week (or such lesser number of hours determined by the Company) during a given offering period, he or she will be deemed to have elected to withdraw from the Purchase Plan and the payroll deductions credited to his or her account will be returned and the option terminated.

Termination of Employment

Upon termination of a participant's employment prior to the end of an offering period for any reason, including retirement or death, he or she will be deemed to have elected to withdraw from the Purchase Plan and the payroll deductions credited to the participant's account will be returned to him or her and such participant's option will automatically be terminated.

Nontransferability

Participants may not assign their rights under the Purchase Plan to any other person other than by will or the laws of descent and distribution.

Changes in Capitalization and Transactions

The Purchase Plan provides for adjustment of the aggregate number of shares that may be issued under the Purchase Plan, as well as the purchase price per share and the number of shares covered by each outstanding option, for changes in our common stock without receipt of consideration by the Company (such as resulting from a stock dividend, stock split, recapitalization, reorganization, merger, consolidation or other similar corporate transaction or event affecting our common stock).

In the event of any corporate transaction, the Board may make such adjustment it deems appropriate to prevent dilution or enlargement of rights in the number, class of or price of shares available for purchase under the Purchase Plan and such other adjustments it deems appropriate. In the event of any corporate transaction, the Board may elect to have the options under the Purchase Plan assumed or such options substituted

Proposal Two Approval of Our Amended and Restated Employee Stock Purchase Plan

by a successor entity, to terminate all outstanding options either prior to their expiration or upon completion of the purchase of shares on the next purchase date, or to take such other action deemed appropriate by the Board.

Administration

The Board or a committee appointed by the Board (in either case, the "Administrator") administers the Purchase Plan. The administration, interpretation or application of the Purchase Plan by the Administrator will be final, conclusive and binding upon all participants. The Administrator may adopt special rules and procedures regarding operation of the Purchase Plan in jurisdictions outside of the United States including, without limitation, to conform to the particular laws

and practices of such countries, treat non-corporate entities as subsidiaries, and treat eligible non-U.S. employees of any participating subsidiary as participating in a subplan outside of an employee stock purchase plan under Section 423 of the Internal Revenue Code (the "Code").

Amendment and Termination of the Plan

The Board may at any time terminate or amend the Purchase Plan, provided that certain amendments such as increasing the number of shares that may be issued under the Purchase Plan require stockholder approval. No such termination can affect previously granted options, and no amendment can make any change in any previously granted option that adversely affects the rights of any participant.

Participation in Plan Benefits

Participation in the Purchase Plan is voluntary and is dependent on each eligible employee's election to participate and his or her determination as to the level of payroll deductions and the eventual purchase price under the Purchase Plan. Accordingly, future purchases under the Purchase Plan are not determinable. Non-employee directors

are not eligible to participate in the Purchase Plan. No purchases have been made under the amended and restated Purchase Plan since its adoption by the Board in March 2021. As of March 12, 2021, the closing price of a share of our common stock was \$247.90.

Certain Federal Income Tax Consequences

The Purchase Plan, and the right of participants to make purchases thereunder, is generally intended to qualify under the provisions of Sections 421 and 423 of the Code. Under these provisions, no income will be taxable to a participant until the shares purchased under the Purchase Plan are sold or otherwise disposed of.

Upon sale or other disposition of the shares, the participant will generally be subject to tax in an amount that depends upon the holding period. If the shares are sold or otherwise disposed of more than two years from the first day of the applicable offering period and one year from the applicable date of purchase, the participant will recognize ordinary income measured as the lesser of (i) the excess of the fair market value of the shares at the time of such sale or disposition over the purchase price and (ii) an amount equal to 15% of the fair market value of the shares as of the first day of

the applicable offering period. Any additional gain will be treated as long-term capital gain.

If the shares are sold or otherwise disposed of before the expiration of these holding periods, the participant will recognize ordinary income generally measured as the excess of the fair market value of the shares on the date the shares are purchased over the purchase price. Any additional gain or loss on such sale or disposition will be long-term or short-term capital gain or loss, depending on how long the shares have been held from the date of purchase. The Company generally is not entitled to a deduction for amounts taxed as ordinary income or capital gain to a participant except to the extent of ordinary income recognized by participants upon a sale or disposition of shares prior to the expiration of the holding periods described above.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of October 3, 2020 about the Company's equity compensation plans under which shares of our common stock may be issued to employees, consultants or members of the Board:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights ⁽¹⁾	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	555,019 ⁽²⁾	\$ 0.00	3,177,501 ⁽³⁾
Equity compensation plans not approved by security holders			
TOTAL	555,019	\$ 0.00	3,177,501(4)

- (1) The weighted average exercise price does not reflect shares that will be issued upon the vesting of outstanding RSUs or upon the exercise of rights under the Employee Stock Purchase Plan.
- (2) This number of shares includes 530,115 shares outstanding under the 2011 Equity Incentive Plan and 24,904 shares outstanding under the Coherent Equity Incentive Plan.
- (3) This number of shares includes 143,465 shares reserved for future issuance under the Employee Stock Purchase Plan and 3,034,036 shares reserved for future issuance under the Coherent Equity Incentive Plan. This number reflects counting each share issued pursuant to vested RSUs (either service or performance-based) under the Coherent Equity Incentive Plan as 2.0 shares. Performance-based RSUs are included at 100% of target goal; under the terms of performance-based RSUs, the recipient may earn between 0% and 200% of the award.
- (4) As of February 26, 2021, 87,192 shares remained available for future issuance under the Employee Stock Purchase Plan and 2,409,742 shares remained available for future issuance under the Coherent Equity Incentive Plan.

Vote Required

The affirmative vote of a majority of the shares present, virtually or by proxy, at the Annual Meeting and entitled to vote on the proposal is required to approve the Purchase Plan. You may vote "FOR," "AGAINST" or "ABSTAIN" on this proposal. Abstentions will have the same effect as a vote "Against" this propsal.

Recommendation

The Board of Directors unanimously recommends that stockholders vote "FOR" the approval of our amended and restated Employee Stock Purchase Plan.

PROPOSAL THREE

RATIFICATION OF THE APPOINTMENT OF DELOITTE & TOUCHE LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board has selected Deloitte & Touche LLP, an independent registered public accounting firm, to audit our financial statements for the fiscal year ending October 2, 2021, and, along with the full Board, recommends that stockholders vote for ratification of such appointment. Deloitte & Touche LLP has audited our financial statements since the fiscal year ended September 25, 1976. Although ratification by stockholders is not required by law, the Audit Committee has determined that it is desirable to request ratification of this selection by the stockholders as a matter of good corporate practice. Notwithstanding its selection, the Audit Committee, in its discretion, may appoint a new independent registered public accounting firm at any time during the year if the Audit Committee believes that such a

change would be in the best interest of Coherent and its stockholders. If stockholders do not ratify the appointment of Deloitte & Touche LLP, the Audit Committee may reconsider its selection. The Audit Committee selected Deloitte & Touche LLP to audit our financial statements for the fiscal year ended October 3, 2020, which was ratified by our stockholders.

Representatives of Deloitte & Touche LLP are expected to be present at the meeting and will be afforded the opportunity to make a statement if they desire to do so. The representatives of Deloitte & Touche LLP are also expected to be available to respond to appropriate questions.

Principal Accounting Fees and Services

The following table sets forth fees for services provided by Deloitte & Touche LLP, the member firms of Deloitte Touche Tohmatsu, and their respective affiliates (collectively, "Deloitte") during fiscal 2020 and 2019:

	2020	2019
Audit fees ⁽¹⁾	\$ 3,612,428	\$ 3,454,348
Tax fees ⁽²⁾	523,716	546,618
All other fees ⁽³⁾	1,895	1,895
Total	\$ 4,138,039	\$ 4,002,861

- (1) Represents fees for professional services provided in connection with the integrated audit of our annual financial statements and internal control over financial reporting and review of our quarterly financial statements, advice on accounting matters that arose during the audit and audit services provided in connection with other statutory or regulatory filings.
- (2) Represents tax compliance and related services.
- (3) Represents the annual subscription for access to the Deloitte Accounting Research Tool, which is a searchable on-line accounting database.

Pre-Approval of Audit and Non-Audit Services

The Audit Committee has determined that the provision of non-audit services by Deloitte is compatible with maintaining Deloitte's independence. In accordance with its charter, the Audit Committee approves in advance all audit and non-audit services to be provided by Deloitte. In other cases, the Chairman of the Audit Committee has the delegated authority

to pre-approve certain additional services, and such pre-approvals are communicated to the full Audit Committee at its next meeting. During fiscal years 2020 and 2019, 100% of the services were pre-approved by the Audit Committee in accordance with this policy.

Vote Required

The affirmative vote of a majority of the shares present, virtually or by proxy, at the Annual Meeting and entitled to vote on the proposal is required to ratify the selection of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2021. You may vote "FOR," "AGAINST" or "ABSTAIN" on this proposal. Abstentions will have the same effect as a vote "Against" this propsal.

Recommendation

The Audit Committee and the Board recommends that stockholders vote "FOR" the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2021.

PROPOSAL FOUR

APPROVAL, ON A NON-BINDING, ADVISORY BASIS, OF OUR NAMED EXECUTIVE OFFICER COMPENSATION

At our annual meeting in March 2017, our stockholders indicated they would like to have an annual advisory vote on executive compensation. Accordingly, the Board proposes that stockholders provide advisory (non-binding) approval of the compensation of our named executive officers, as disclosed pursuant to the compensation disclosure rules of the SEC, including the Compensation Discussion and Analysis, the Fiscal 2020 Summary Compensation Table and related tables and disclosure.

As described in our Compensation Discussion and Analysis, we have adopted an executive compensation philosophy designed to provide alignment between executive pay and performance and to focus executives on making decisions that enhance our stockholder value in both the short and long term. Executives are compensated in a manner consistent with Coherent's strategy, competitive practices, stockholder interest alignment, and evolving compensation governance standards.

Vote Required

The affirmative vote of a majority of the shares present, virtually or by proxy, at the Annual Meeting and entitled to vote on the proposal is required to approve the compensation of our named executive officers disclosed in this proxy statement. You may vote "FOR," "AGAINST" or "ABSTAIN" on this proposal. Abstentions will have the same effect as a vote "Against" this propsal.

The vote is an advisory vote and, therefore, not binding. The Board values the opinions of our stockholders and to the extent there is any significant vote against our named executive officer compensation as disclosed in this proxy statement, the Board will consider our stockholders' concerns and the Compensation and HR Committee will evaluate whether any actions are necessary to address those concerns.

Recommendation

The Board recommends that stockholders vote "FOR" the approval, on a non-binding, advisory basis of our named executive officer compensation disclosed in this proxy statement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

he following table sets forth, as of February 26, 2021, certain information with respect to the beneficial ownership of our common stock by (i) any person (including any "group" as that term is used in Section 13(d)(3) of the Exchange Act) known by us to be the beneficial owner of more than 5% of our voting securities, (ii) each director and each nominee for director, (iii) each of the executive officers named in the Summary Compensation Table appearing herein, and (iv) all current

executive officers and directors as a group. We do not know of any arrangements, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change of control. Unless otherwise indicated, the address of each stockholder in the table below is c/o Coherent, Inc., 5100 Patrick Henry Drive, Santa Clara, California 95054.

Name and Address	Number of Shares	Percent of Total ⁽¹⁾
Wellington Management Group LLP ⁽²⁾ c/o Wellington Management Company LLP 280 Congress Street Boston, MA 02210	3,118,324	12.75%
Vanguard Group Inc. ⁽³⁾ 100 Vanguard Blvd. Malvern, PA 19355	2,242,232	9.17%
Blackrock Inc. ⁽⁴⁾ 55 East 52nd Street New York, NY 10055	2,214,576	9.05%
Victory Capital Management Inc. ⁽⁵⁾ 4900 Tiedeman Rd. 4 th Floor Brooklyn, OH 44144	1,745,792	7.14%
The Hartford Mutual Funds, Inc. on behalf of: Hartford Midcap Fund and Hartford Midcap Value Fund ⁽⁶⁾ 690 Lee Road Wayne, PA 19087	1,589,206	6.50%
Andreas W. Mattes ⁽⁷⁾	7,934	*
John R. Ambroseo ⁽⁸⁾	187,283	*
Kevin Palatnik	31,437	*
Mark Sobey	12,477	*
Bret DiMarco ⁽⁹⁾	22,717	*
Thomas Merk ⁽¹⁰⁾	7,819	*
Jay T. Flatley ⁽¹¹⁾	42,162	*
Pamela Fletcher	3,738	*
Beverly Kay Matthews	2,898	*
Michael R. McMullen	5,187	*
Garry W. Rogerson ⁽¹²⁾	16,662	*
Steve Skaggs	13,662	*
Sandeep Vij ⁽¹³⁾	9,662	*
All current directors and executive officers as a group (11 persons) ⁽¹⁴⁾	163,147	*

Represents less than 1%.

⁽¹⁾ Based upon 24,463,754 shares of common stock outstanding as of February 26, 2021. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to the securities. In

- computing the number of shares beneficially owned by a person and the percentage ownership of that person, each share of common stock subject to options held by that person that are currently exercisable or will be exercisable within 60 days of February 26, 2021 and all RSUs held by that person that will vest within 60 days of February 26, 2021. Such shares are not deemed outstanding for the purpose of computing the percentage ownership of any other person.
- (2) According to the information reported by Wellington Management Group LLP, Wellington Group Holdings LLP, Wellington Investment Advisors Holdings LLP and Wellington Management Company LLP on a Schedule 13G/A jointly filed with the SEC on February 4, 2021, (a) each of Wellington Management Group LLP, Wellington Group Holdings LLP, and Wellington Investment Advisors Holdings LLP beneficially owns an aggregate of 3,118,824 shares, which consists of (i) 2,744,965 shares as to which it has shared voting power and (ii) 3,118,324 shares as to which it has shared dispositive power, and (b) Wellington Management Company LLP beneficially owns an aggregate of 3,026,761 shares, which consists of (i) 2,689,216 shares as to which it has shared voting power and (ii) 3,026,761 shares as to which it has shared dispositive power.
- (3) According to the information reported by The Vanguard Group ("Vanguard") on a Schedule 13G/A filed with the SEC on February 10, 2021, Vanguard beneficially owns an aggregate of 2,242,232 shares, which consists of (i) 18,263 shares as to which it has shared voting power, (ii) 2,205,184 shares as to which it has sole dispositive power, and (iii) 37,048 shares as to which it has shared dispositive power.
- (4) According to the information reported by BlackRock, Inc. ("BlackRock") on a Schedule 13G/A filed with the SEC on January 29, 2021, BlackRock beneficially owns an aggregate of 2,214,576 shares, which consists of (i) 2,131,397 shares as to which it has sole voting power and (ii) 2,214,576 shares as to which it has sole dispositive power.
- (5) According to the information reported by Victory Capital Management Inc. ("Victory Capital") on a Schedule 13G/A filed with the SEC on February 5, 2021, Victory Capital beneficially owns an aggregate of 1,745,792 shares, which consists of (i) 1,673,292 shares as to which it has sole voting power and (ii) 1,745,792 shares as to which it has sole dispositive power.
- (6) According to the information reported by The Hartford Mutual Funds, Inc. on behalf of Hartford Midcap Fund and Hartford Midcap Value Fund ("Hartford") on a Schedule 13G filed with the SEC on February 9, 2021, Hartford beneficially owns an aggregate of 1,589,206 shares, as to which it has shared voting and dispositive power.
- (7) Includes 5,389 shares issuable upon vesting of RSUs within 60 days of February 26, 2021.
- (8) Shares are held by the Ambroseo-Lacorte Family Trust, of which Mr. Ambroseo is a trustee.
- (9) Shares are held by the DiMarco Family Trust, of which Mr. DiMarco is a trustee.
- (10) Mr. Merk's employment terminated on December 31, 2020. We have provided his ownership information based on the last information known to us.
- (11) Shares are held by the Flatley Family Trust, of which Mr. Flatley is a trustee.
- (12) Shares are held by the 2000 Rogerson Family Revocable Living Trust, of which Mr. Rogerson is a trustee.
- (13) Shares are held by the Vij Family 2001 Trust, of which Mr. Vij is a trustee.
- (14) Includes an aggregate of 5,389 shares issuable upon vesting of RSUs within 60 days of February 26, 2021.

OUR EXECUTIVE OFFICERS

The name, age, position and a brief account of the business experience of our executive officers as of March 19, 2021 are set forth below:

Name	Age	Office Held
Andreas ("Andy") W. Mattes	59	President and Chief Executive Officer
Kevin Palatnik	63	Executive Vice President and Chief Financial Officer
Mark Sobey	61	Executive Vice President and Chief Operating Officer
Bret DiMarco	52	Executive Vice President, Chief Legal Officer and Corporate Secretary

Andy Mattes. For Mr. Mattes' biography, please see "Proposal One—Election of Directors—Biographical Information" above.

Kevin Palatnik. Mr. Palatnik has served as our Executive Vice President and Chief Financial Officer since February 2016. Prior to that from August 2011 until its acquisition by Knowles Corporation in July 2015, Mr. Palatnik served as the Chief Financial Officer of Audience, Inc., a provider of intelligent voice and audio solutions for mobile devices. Prior to that from June 2001 to November 2010, Mr. Palatnik held various roles at Cadence Design Systems, Inc., an electronic design automation software company, including as its senior vice president and chief financial officer. Mr. Palatnik also served as a member of the board of directors and chair of the audit committee of Adesto Technologies, Inc., a provider of innovative, application-specific semiconductors embedded systems that comprise the essential building blocks of Internet of Things (IoT) edge devices from September 2015 until July 2020 when the company was sold to Dialog Semiconductor. Mr. Palatnik received a B.S. in Industrial Engineering and Operations Research and a M.B.A. from Syracuse University.

Mark Sobey. Dr. Sobey has served as our Executive Vice President and Chief Operating Officer since his appointment on April 6, 2020. Dr. Sobey previously served as our Executive Vice President and General Manager of OEM Laser Sources

(OLS) from November 2016 to April 2020, Executive Vice President and General Manager of Specialty Laser Systems (SLS) from April 2010 to November 2016, and Senior Vice President and General Manager of SLS from joining Coherent in July 2007 until April 2010. Prior to Coherent, Dr. Sobey spent over 20 years in the Laser and Fiber Optics Telecommunications industries, including Senior Vice President roles in Product Management at Cymer and Global Sales at JDS Uniphase. He received his PhD in Engineering and BSc in Physics from the University of Strathclyde in Scotland.

Bret DiMarco. Mr. DiMarco has served as our Executive Vice President and Chief Legal Officer since October 2020. Mr. DiMarco previously served as our Executive Vice President and General Counsel from June 2006 to October 2020 and he has served as our Corporate Secretary since February 2007. From February 2003 until May 2006, Mr. DiMarco was a member and from October 1995 until January 2003 was an associate at Wilson Sonsini Goodrich & Rosati, P.C., a law firm. Mr. DiMarco received a Bachelor's degree from the University of California at Irvine and a Juris Doctorate degree from the Law Center at the University of Southern California. Additionally, Mr. DiMarco is a member and chair of the Nasdaq Listing and Hearing Review Council and an adjunct professor at the University of California, Hastings College of the Law.

COMPENSATION DISCUSSION AND ANALYSIS

Introduction

In this section, we describe the material components of our executive compensation program for our "Named Executive Officers" or "NEOs" for fiscal 2020: Messrs. Mattes, Ambroseo, Palatnik, Sobey, DiMarco and Merk. Messrs. Ambroseo and Merk are no longer executive officers of the Company. Effective April 6, 2020, Mr. Ambroseo retired from his position as our President and Chief Executive Officer and as a member of our Board, transitioning to the role of Special Advisor, and Mr. Mattes was appointed by our Board to serve as President, Chief Executive Officer and a member of the Board. Mr. Merk also transitioned from his executive officer role after the end of fiscal 2020 (see "—Transitions" below). In addition, on August 20, 2020, the Company and Mr. Palatnik entered into an executive transition services agreement whereby Mr. Palatnik was to retire from his role as Executive Vice President and Chief Financial Officer no later than February 28, 2021; however, in conjunction with the Company's execution of an Agreement and Plan of Merger, dated as of January 18, 2021, with Lumentum Holdings Inc., Mr. Palatnik and the Company terminated the executive transition services agreement.

We also provide an overview of our executive compensation philosophy, principal compensation policies and practices by which the Compensation and HR Committee, or the committee, arrives at its decisions regarding NEO compensation.

NEO Compensation Overview

The following chart sets forth our compensation philosophy and design principles:

Compensation Philosophy	Compensation Design Principles
Retain and hire talented executives	Our executives should have market competitive compensation and the committee orients our target total compensation generally near the 50th percentile of the committee's selected peer group, with actual compensation falling above or below depending upon our financial performance and the performance of our stock price against an index over a three-year vesting period. Compensation components may be above or below such percentile target and vary by individual executive.
Pay for performance, with both	A significant portion of the annual compensation of our executives is designed to
short and long-term measurements	vary with annual business performance and a significant portion of long-term equity compensation is based on the long-term relative performance of our stock price in comparison to the Russell Index (as defined below), by way of a single three-year vesting period.
Tie compensation to performance of our core business	Payouts under our fiscal 2020 annual cash incentive plan were dependent upon corporate achievement of <i>two performance targets</i> : revenue and Adjusted EBITDA dollars. The committee determined that these were the most effective metrics for tying management's compensation directly to our core operating results for fiscal 2020. In fiscal 2020, the Company's financial results did not meet the challenging targets established by the committee and, as a result, <i>no payout</i> under our annual cash incentive plan was made to our NEOs. In connection with the COVID pandemic, we thought it important to incentivize our executives through a special equity performance award based on fiscal 2020 free cash flow because cash flow is essential to maintaining a healthy business.
Align compensation with	We believe that having a significant portion of compensation tied to equity with
stockholder interests	both time and performance-based vesting requirements directly aligns management to stockholder returns. Performance-based RSUs make up the largest potential portion of the equity grants for our CEO, and generally make up half of the equity grants of our other NEOs at target. The grants are fully at risk and the executive may not receive any shares at the end of the vesting period. Grants of regular performance-based RSUs in fiscal 2020 have the same measurement period consistent with historical practice: a single vesting date three years from grant solely dependent upon the performance of our common stock price measured against the Russell Index. In fiscal 2019, target was increased from meeting the Russell Index performance to exceeding the Russell Index performance. Prior to fiscal 2018, we used the Russell 2000 Index to compare our stock price performance, but due to an increase in our market cap, the Company was moved up to the Russell 1000 Index, and, accordingly, for grants made since the first quarter of fiscal 2018, the committee compares our stock price performance against the performance of the Russell 1000 Index. We refer to the applicable Russell Index as the "Russell Index."

The following chart sets forth our principal elements of NEO compensation:

Executive Compensation Program Overview—Elements of Compensation

		pensation i rogiam ov		•
Element	Variability	Objective	How Established	Fiscal Year 2020 for NEOs
Base Salary	Fixed	Provide a competitive fixed component of compensation that, as part of a total cash compensation package, enables us to attract and retain top talent.	Reviewed against executive officer's skill, experience and responsibilities, and for competitiveness against our compensation peer group.	Base salary increased for 2020 for NEOs to more closely align with peers and market data provided by the committee's compensation consultant.
Annual Cash Incentive	Performance Based	Offer a variable cash compensation opportunity once per fiscal year generally based upon the level of achievement of corporate performance targets.	Target payouts set by measuring total cash compensation opportunity against the peer group. Corporate performance targets based on meeting operational goals tied to the Company's operating budget for the applicable fiscal year.	Annual bonus measurement period in fiscal 2020 tied to revenue and Adjusted EBITDA achievement. Revenue achievement weighted at 25% and Adjusted EBITDA achievement weighted at 75%. Total payout can range from 0% to 200% of target. For fiscal 2020, the Company did not meet the performance targets, and as a result, there was no cash bonus payout .
RSUs—Service Based	Value Tied to Stock Price	Align long-term management and stockholder interests and strengthen retention with three-year vesting. Service-based awards create long-term retention.	Target total value of annual awards using market data (reviewed against our compensation peer group for competitiveness) and the executive officer's responsibilities, contributions and criticality to ongoing success.	Fiscal 2020 service-based awards vest ½ per year over three years, with the first vesting date occurring on the one-year anniversary of the grant date.

2020 program.

			Compensation	on discussion and Analysis
Element RSUs— Performance Based	Variability Performance Based—Value Tied to Stock Price and Based on Relative Performance to Russell Index	Objective At-risk performance- based awards provide an incentive opportunity based upon the performance of our stock price against the performance of the Russell Index. This component directly aligns NEO pay to our stockholders' interests.	How Established Target total value of annual awards using market data (reviewed against our compensation peer group for competitiveness) and the executive officer's responsibilities, contributions and criticality to ongoing success.	Fiscal Year 2020 for NEOs Performance award measured by comparing our stock price performance against that of the Russell Index. To achieve 100% vesting of the awards, our stock price must outperform the Russell Index by 2% during the defined performance period. If our stock outperforms that target, the award is increased 2% for each percentage point of outperformance (with a cap of a 200% vesting). If our stock underperforms the target, the award is decreased 2% for each of the first two percentage points of underperformance, and decreased 4% for each additional percentage point of underperformance (with a floor of a 0% vesting).
	Performance Based—Value Tied to Free Cash Flow	At-risk performance- based awards provide an incentive opportunity based upon generating cash as essential to maintaining a healthy business particularly during the COVID pandemic.	Target total value of awards using market data and the executive officer's responsibilities and contributions.	Performance award measured by achievement of annual free cash flow. Vesting capped at 100% of target award.
Other Benefits	Primarily Fixed	Provide competitive	Reviewed for	No significant changes for fiscal

employee benefits.

We do not view this as a significant component of our

executive compensation program.

competitiveness.

Stockholder Engagement

The committee considers feedback from our stockholders regarding our executive compensation program, including as expressed by the results of our annual advisory vote on executive compensation, which our stockholders have historically strongly supported. We have strong pay for performance alignment, and the say-on-pay proposal for fiscal 2019 compensation was approved by an overwhelming majority of our stockholders.

Beyond the results of our annual say-on-pay vote, our stockholder engagement program is designed to foster an on-going dialogue with our stockholders. The principal form of engagement in this program consists of our CEO and CFO regularly meeting with our stockholders throughout the year. These meetings are primarily focused on financial and business matters related to the Company, and they allow our stockholders the opportunity to raise questions on a variety of topics, including our executive compensation design philosophy and principles. We believe this regular engagement has been productive and has allowed for a helpful exchange of ideas and perspectives for both management and our stockholders. In addition, in preparation for our annual meeting of stockholders held in April 2020, our CFO and CLO contacted each of our top five stockholders and were able to meet with two of them to discuss the Company's

compensation practices and the equity plan proposal that was included in our proxy statement for such meeting.

As a result of these efforts, our CEO and CFO met with over 45 stockholders (in many cases speaking to a particular investor multiple times throughout the year), representing approximately 60% of our outstanding shares as of the end of fiscal 2020.

The Board, the committee and the Company's management greatly value the feedback from those meetings, and consider such feedback in deliberations on important topics, such as executive compensation design and principles, throughout the year.

Also, as part of our stockholder engagement program, we encourage our stockholders to directly express their views to the committee. The committee welcomes direct stockholder feedback and considers such feedback as well as our historical "say-on-pay" results in its deliberations on executive compensation.

We strongly urge our stockholders to read this Compensation Discussion and Analysis in conjunction with Proposal Four.

Transitions

Appointment of New CEO

On April 6, 2020, Mr. Mattes became President and CEO of the Company, as well as a member of the Board.

In connection with Mr. Mattes' appointment as President and CEO, the Company and Mr. Mattes entered into an employment agreement on March 31, 2020 providing for, among other things, a base salary of \$850,000 per year and a 2020 fiscal year target bonus of 120% of his base salary. Pursuant to his employment agreement, Mr. Mattes received a signing bonus of \$500,000, subject to repayment to the Company if within the first year of his employment, he terminates employment without good reason or the Company terminates his employment for cause.

The employment agreement also provided for equity grants within 30 days after his commencement of employment which were made as described below in "Equity Awards."

Under his employment agreement, Mr. Mattes is eligible for a severance payment equal to twice the sum of his annual salary and target bonus as well as a benefit allowance if his employment is terminated without cause or he terminates his employment for good reason. Mr. Mattes is covered by the Company's change of control plan and entitled to participate in employee benefit plans generally applicable to senior executives of the Company. Mr. Mattes also entered into the Company's standard form of indemnification and confidentiality agreements.

Retirement of CEO

Mr. Ambroseo retired from his role as President and CEO and a member of the Board, effective April 6, 2020. Upon his retirement, Mr. Ambroseo transitioned to the role of a Special Advisor to the Company. This transition was effected pursuant to a transition and retirement agreement that was entered into by Mr. Ambroseo and the Company in April 2019. The transition and retirement agreement provides for continuation

of Mr. Ambroseo's employment through December 1, 2021, with a continuation of his compensation through April 13, 2021 and a base salary of \$10,000 per month thereafter through December 1, 2021, continued vesting in outstanding equity awards through December 1, 2021 and eligibility for change of control benefits if a change of control occurs by such date. Because performance thresholds were not achieved, neither Mr. Ambroseo nor any other executive vested in performancebased restricted stock units that were eligible to be earned in November 2020. The transition and retirement agreement also includes customary confidentiality, proprietary information and indemnification provisions and includes a release by Mr. Ambroseo. The terms of the agreement were extensively reviewed and discussed with Compensia, the committee's independent compensation consultant. Both Mr. Ambroseo and the committee strongly believed that entering this agreement was in the best interest of Coherent and our stockholders by further supporting the upcoming transition.

In addition, in the first quarter of fiscal 2020, the committee determined to make an automatic grant of time-based RSUs

with a value of approximately \$200,000 to Mr. Ambroseo on the first day of each fiscal quarter in which he was still serving as CEO, with each such grant vesting on the last day of the fiscal quarter in which it was granted. Mr. Ambroseo received three such grants, which ceased once he was no longer CEO. The committee determined to make these quarterly grants in lieu of granting Mr. Ambroseo any additional time or performance-based RSUs in fiscal 2020.

Other Transition

Mr. Merk also transitioned from his executive officer role after the end of fiscal year 2020 and entered into an agreement that provided him with the same level of benefits as the Leadership Change severance benefits under our Change of Control and Leadership Change Severance Plan as described below in "Other Benefits—Severance and Change of Control Arrangements" and in the section entitled "Potential Payments Upon Termination or Change of Control" below.

Key Design Changes to Executive Compensation

The committee closely reviewed the Company's executive compensation recoupment (or "clawback") policy in light of the state of applicable law, governance trends and practices of other public companies.

In fiscal 2020, the Board, at the recommendation of the committee and management, adopted a new clawback policy, expanding potential recoupment of cash and equity compensation to include all NEOs, as well as all employees of the Company holding the title of Senior Vice President or higher who report directly to our CEO. As described further below, the new clawback policy allows the committee to recoup excess incentive compensation from such covered individuals in the event of a restatement of the Company's financial results, regardless of whether the covered executive played a role in the need for the restatement.

As disclosed in the Company's fiscal 2019 proxy statement, the committee made the following changes to the design of executive compensation in fiscal 2019 continuing through fiscal 2020:

 Redesigned the measurement of the Company's performance-based RSUs to require performance above the Russell Index in order to achieve target vesting levels; and

 Considered internal pay equity between the CEO and other NEOs as a factor in determining compensation.

The committee made changes to the design of performancebased RSUs granted in fiscal 2021:

- Measured Company stock performance against the stock performance of the companies within the Russell Index rather than the Russell Index itself requiring the Company stock performance to be at the 55th percentile (above the median) with respect to the companies within the Russell Index to achieve target vesting;
- Capped the maximum value of performance-based RSUs at vesting at five times the grant date stock price; and
- Capped vesting of performance-based RSUs at 100% of target amount if the total stockholder return for the Company is not positive (greater than 0).

Executive Summary

Our Business

Founded in 1966, Coherent, Inc. is one of the leading providers of lasers and laser-based technology for scientific, commercial and industrial customers. Our common stock is listed on the Nasdaq Global Select Market and is part of several indexes, including the Russell 1000 and Standard & Poor's MidCap 400 Index. For more information about our business, please read the sections captioned "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our annual report on Form 10-K for fiscal 2020, filed with the SEC on December 1, 2020.

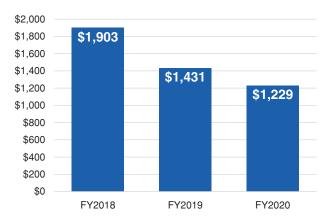
Selected Business Highlights

We experienced a significant decrease in year-over-year revenue, Adjusted EBITDA and non-GAAP earnings per share in fiscal 2020 and accordingly failed to meet our internal targets. As a result, you will see in the coming pages that our performance-related executive compensation in our annual cash program yielded no payout (zero %) in fiscal 2020.

Set forth below are tables reflecting several performance metrics from the last three fiscal years that impact the compensation for our NEOs.

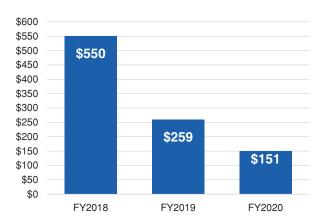
Our revenue decreased 25% from fiscal 2018 to fiscal 2019 and decreased 14% from fiscal 2019 to fiscal 2020 (dollars in millions):

ANNUAL REVENUE



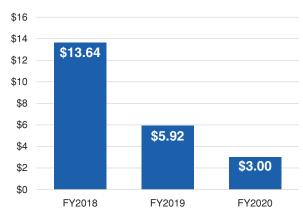
Our Adjusted EBITDA decreased 53% from fiscal 2018 to fiscal 2019 and decreased 42% from fiscal 2019 to fiscal 2020 (dollars in millions):

ADJUSTED EBITDA



Our non-GAAP earnings per share from continuing operations decreased 57% from fiscal 2018 to fiscal 2019 and decreased 49% from fiscal 2019 to fiscal 2020:

NON-GAAP EARNINGS PER SHARE*



*Non-GAAP earnings per share is defined as earnings per share excluding certain recurring and non-recurring items.

For a reconciliation table of earnings per share on a GAAP basis to non-GAAP basis and net income (loss) from continuing operations on a GAAP basis to Adjusted EBITDA, please refer to the "Reconciliation Table" at the end of this section.

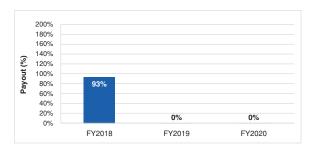
Compensation Overview

Compensation Philosophy. We tie executive total compensation to stockholder value with two measures: our operational results and the comparative performance of our stock price. This approach provides strong alignment between executive pay and performance, and focuses executives on making decisions that enhance our stockholder value in both the short and long-term. We design our executive compensation program to achieve the following goals:

- Retain and hire talented executives—Our executives should have market competitive compensation, and the committee orients our target total compensation generally near the 50th percentile of the committee's selected peer group (as noted below), with actual compensation falling above or below depending upon Coherent's financial performance. Additionally, certain compensation components may be above or below such percentile target and vary by individual executive.
- Pay for performance, with both short and long-term measurements—A significant portion of the annual compensation of our executives is designed to vary with annual business performance and the long-term relative performance of Coherent's stock price in comparison to the Russell Index (by way of a single three-year vesting period). The committee and management set demanding performance targets. For example, there was no annual cash bonus paid out for fiscal 2020 as explained below. To incentivize conservation of cash during the COVID pandemic, the committee granted performance RSUs based on achievement of free cash flow which were earned.

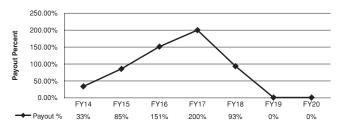
The following chart shows the payout percentages as compared to the committee's selected financial targets for each of the last three fiscal years under our annual cash incentive plan:

PAYOUT PERCENTAGE UNDER ANNUAL CASH INCENTIVE PLAN



Payouts under our annual cash incentive plan over the last seven years have ranged from 0% to 200% as shown in the following chart:

VCP Payout Percentage

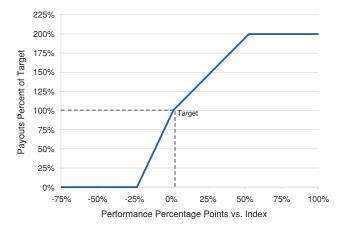


- Tie compensation to performance of our core business—Our fiscal 2020 annual cash incentive plan was dependent upon Coherent's achievement against two criteria: Adjusted EBITDA dollars and revenue. The committee determined that these were the most effective metrics for tying management's compensation directly to Coherent's core operating results for fiscal 2020.
- · Align compensation with stockholder interests-We believe that having a significant portion of compensation tied to equity, with both time and performance-based vesting requirements, directly aligns management to stockholder interests. The performance-based RSUs make up the largest potential portion of the equity grants for our CEO. Grants of performance-based RSUs historically have the same measurement period: a single vesting date three years from grant solely dependent upon the performance of Coherent's common stock price measured against the Russell Index. Prior to fiscal 2019, the performance target was equal to meeting the index's performance. As mentioned above, the committee modified the design of the performance-based RSU grants made in the first guarter of fiscal 2019 and going forward to require performance two percentage points above the Russell Index to achieve the targeted vesting. If our stock outperforms that target during the defined performance period, the award is increased 2% for each percentage point of outperformance (up to a maximum cap of 200% of target). If our stock underperforms the target, the award is decreased 2% for each of the first percentage points of underperformance, decreased 4% for each additional percentage point of underperformance (with a floor of a 0% vesting). As a result, compensation decreases faster for failing to outperform the Russell Index than it increases for exceeding the target. If Coherent's stock underperforms the Russell Index by more than 24%, then there is no payout, but in order to hit the maximum possible payout, Coherent's stock has to

outperform the Russell Index by at least 52%. The table and chart below illustrate this structure:

FISCAL 2020 PERFORMANCE RSU VESTING

Relative Performance Percentage Against the Russell Index	Vesting Percentage of Target Amount
152% or more	200% (maximum vesting)
102%	100%
100%	96%
85%	36%
77%	4%
76% or less	0% (no PRSUs vest)



Elements of Executive Compensation. During fiscal 2020, the compensation of our NEOs primarily consisted of (A) base salary, (B) participation in our annual variable compensation plan (referred to herein as our "annual cash incentive plan" or "VCP"), (C) long-term equity incentive awards divided between time-based RSUs and performance-based RSUs and (D) special performance-based equity incentive awards based on achievement of free cash flow metrics during the COVID pandemic. For fiscal 2020, on average, approximately 78% of our NEO's target compensation and approximately 88% of our CEO's target compensation was delivered through our annual cash incentive plan and long-term equity incentives (both time and performance RSUs).

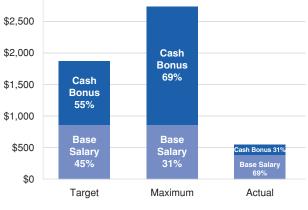
As a demonstration of how executive cash compensation is tied to company performance, the cash compensation for our

CEO during fiscal 2020 at target, maximum and actual can be illustrated as follows (dollars in thousands):

CEO FY2020 CASH PAY MIX*

\$3,000





*Actual excludes sign-on bonus of \$500,000 and includes special strategic operating plan incentive.

Variable

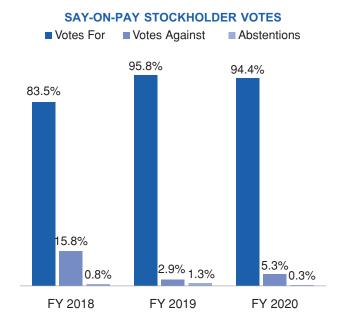
Fixed

Compensation Governance. "Pay for performance" has been and remains at the core of Coherent's executive compensation coupled with appropriately managing risk and aligning our compensation programs with long-term stockholder interests. We accomplish this primarily by having a majority of our NEOs' potential compensation being "at risk" through a combination of (i) an annual cash incentive plan tied to achievement of financial metrics and (ii) equity award vesting tied to achievement of a performance metric. The committee monitors and considers evolving governance approaches and standards in executive compensation, as well as communications it receives directly from stockholders.

As more fully discussed below, recent examples of how this philosophy is applied and changes made pursuant to compensation practices as well as governance practices in effect during fiscal 2020, include:

- · We have minimum share ownership requirements for our CEO and members of the Board as well as Executive Vice Presidents and Senior Vice Presidents who report to the CEO;
- · Our performance-based RSU program is measured by the Company's stock price achievement against the Russell Index over a three-year period, which the committee believes is a direct connection to long-term total stockholder interests. Fiscal 2020 grants require achievement in excess of the Russell Index to achieve target payout;

- The committee is composed entirely of directors who satisfy the standards of independence in Coherent's Corporate Governance Guidelines and Nasdaq listing standards;
- The committee made decisions regarding CEO compensation without the CEO present;
- Executive incentive compensation programs include limits on maximum payouts to contain the risk of excessive payouts;
- The committee utilizes an independent compensation consultant;
- We have eliminated material historical perquisites as an element of compensation for our NEOs;
- We had a recoupment or "claw-back" policy for our CEO and CFO, and, in fiscal 2020, our Board, at the recommendation of the committee, adopted an updated policy extending coverage to all individuals with the title Senior Vice President and above, as described below;
- We have in place a policy prohibiting executive officers and directors from hedging or pledging Company stock;
- Change-of-control payments occur solely in "double-trigger" circumstances, that is a change of control coupled with a termination of employment within a defined time period;
- None of our NEOs are entitled to any "gross-up" to offset the impact of IRS Code Sections 280G or 4999 in connection with a change of control; and
- Our stockholders have historically strongly supported our executive compensation philosophy and design as seen in the significant majorities approving our "say-on-pay" proposal (does not include broker non-votes; rounded).



Role of Management

The committee regularly met with the CEO to obtain recommendations with respect to the compensation programs, practices and packages for our NEOs other than the CEO. Additionally, Mr. Palatnik, our Executive Vice President and CFO, Mr. DiMarco, our Executive Vice President, Chief Legal Officer and Corporate Secretary, and members of our human resources department are regularly invited to meetings of the committee or otherwise asked to assist the committee.

The assistance of these individuals includes providing financial information and analysis for the committee and its compensation consultant, taking minutes of the meeting or providing legal advice, developing compensation proposals for consideration, and providing insights regarding our employees (executive and otherwise) and the business context for the committee's decisions. NEOs attend portions of committee meetings when invited by the committee, but leave the meetings when matters potentially affecting them are discussed.

Role of the Committee's Compensation Consultant

The committee utilizes the services of an independent compensation consultant and in fiscal 2020, engaged Compensia as its independent compensation consultant. Compensia assisted the committee by:

- Reviewing and analyzing our executive compensation program, including providing NEO tally sheets to the committee;
- · Providing market data for fiscal 2020 compensation; and
- Providing further insight on compensation governance trends.

The independent compensation consultant serves at the discretion of the committee and is not permitted to do other work for Coherent unless expressly authorized by the committee. Since retention, Compensia has not performed any work for Coherent other than its work with the committee, the Board or other committees of the Board, such as work with the Governance and Nominating Committee with respect to compensation for service on the Board and its committees. The committee is focused on maintaining the independence of its compensation consultant and, accordingly, does not anticipate having its consultant perform any other work for the Company in addition to its direct work for the committee, the Board, or another committee of the Board. The committee has assessed the independence of Compensia and concluded that no conflict of interest exists.

The Company also participates in and maintains a subscription to the Radford Global Technology and Sales surveys. These surveys provide benchmark data and

compensation practices reports of a broad cross-section of technology companies similar in size to Coherent to assist us with employee compensation generally.

Pay Positioning Strategy and Benchmarking of Compensation

Philosophically the committee initially orients target total compensation for our NEOs generally near the 50th percentile of our peers (as measured by our designated peer group and compiled by the committee's independent compensation consultant and, when applicable, including, for example, when there are few comparable positions reported in the proxy data of our peer group companies, data from the Radford Global Technology Survey), resulting in targeted total compensation that is competitive for performance that meets the objectives established by the committee. Each NEO's actual salary, cash incentive compensation opportunity and equity compensation grant value may fall below or above the target position based on the individual's performance, contributions, scope of role, experience, skills and knowledge, as well as the historical pay structure for each executive, Company performance and the proportion of compensation at risk. These factors are weighed by the committee in its judgment, and no single factor takes precedence over others nor is any formula used in making these decisions nor was the impact of any factor on the determination of compensation quantifiable. In general, the committee will balance between cash and equity compensation elements to have more compensation in equity for each NEO in order to more closely align NEO compensation directly with that of the performance of the Company and with stockholders' interests. In fiscal 2020, the committee also asked its independent compensation consultant to review and report on internal pay equity between the CEO and the other NEOs as a factor when approving compensation.

The CEO's review of the performance of the other NEOs is considered by the committee in making individual pay decisions. With respect to the CEO, the committee additionally considers the performance of Coherent as a whole and the views of other members of the Board regarding the CEO's performance. Actual realized pay is higher or lower than the targeted amounts for each individual based primarily on the Company's performance.

In analyzing our executive compensation program relative to target market positioning, the committee reviews information

provided by its independent compensation consultant, which includes an analysis of data from peer companies' proxy filings with respect to similarly situated individuals at the peer companies (when available) and the Radford Global Technology Survey (as a supplement when peer group company data is unavailable). It is important to note that these are the peers selected by the committee. The committee uses criteria as described below in determining the appropriate peer group. There are proxy advisory services that use their own criteria to select peers for the Company and, accordingly, stockholders should be aware that these advisory services do not, in fact, follow the same methodology of the committee and there may be wide variances between the different peer groups used by these services. Any comparison of company performance or market data for executive compensation using a completely different peer group will, therefore, naturally result in a different analysis.

For pay decisions made for fiscal 2020, after consulting with its independent compensation consultant, the committee determined that the following companies comprise the peer group for fiscal 2020:

Ciena Corporation (CIEN)	Lumentum Holdings Inc. (LITE)
Cypress Semiconductor Corporation (CY)	MKS Instruments (MKSI)
Dolby Laboratories (DLB)	National Instruments (NATI)
Entegris (ENTG)	Nuance Communications (NUAN)
F5 Networks (FFIV)	OSI Systems (OSIS)
Finisar (FNSR)	Synaptics (SNYA)
FLIR Systems (FLIR)	Teradyne (TER)
II-VI Inc. (IIVI)	Trimble Inc. (TRMB)
Itron, Inc. (ITRI)	ViaSat (VSAT)
Keysight Technologies (KEYS)	

Several factors are considered in selecting the peer group, the most important of which are:

Primary Criteria

- Industry (primarily companies in the Electronic equipment, Semiconductor and communications equipment sub-industry classifications defined by the Global Industry Classification Standard (GICS) system); and
- Revenue level (primarily companies with annual revenues between 0.5x-2.0x that of Coherent).

Secondary Criteria

· Market capitalization between 0.25x and 3.0x of Coherent;

- Market capitalization as a multiple of revenues of greater than 1.5x; and
- · A disclosed peer of a peer company.

The committee reviews the composition of the peer group annually to ensure it is the most relevant set of companies in light of the foregoing criteria to use for comparison purposes, but does not necessarily remove a peer company from the peer group the first year it ceases to meet the criteria. II-VI Inc. was added to the companies comprising the Company's peer group for fiscal 2020 replacing one company (Microsemi, due to acquisition) from the fiscal 2019 peer group.

Components of Our Executive Compensation Program

The principal components of our executive officer compensation and employment arrangements during fiscal 2020 included:

- · Base salary;
- · Annual cash incentive plan;
- · Equity awards; and
- · Other benefits.

These components were selected because the committee believes that a combination of salary, incentive pay and benefits is necessary to help us attract and retain the executive talent on which Coherent's success depends.

The following table shows the components of total direct compensation at target and maximum for our NEOs as a group for fiscal 2020. In maintaining the design for fiscal 2020, the committee recognized the significant support received from the Company's stockholders for the compensation program design, as reflected in the continued strong vote totals in favor of our executive compensation through our annual "say-on-pay" proposal.

CEO AND NEO (OTHER THAN CEO) FY2020 DIRECT COMPENSATION MIX*



*Excludes special one-time RSU & PRSU grants and performance-based RSUs measured by achievement of annual free cash flow.

Base Salary

Base salary is the foundation to providing an appropriate total cash compensation package. We use base salary to fairly and competitively compensate our executives for the jobs we ask them to perform. This is the most stable component of our executive compensation program, as this amount is not at risk. The committee reviewed market data information provided by Compensia with respect to similarly situated individuals to assist it in determining the base salary for each NEO, depending upon the particular executive's experience, skills,

knowledge, performance and contribution. The committee increased the base salaries of our NEOs in the first quarter of fiscal 2020, as supported by compensation analysis provided by Compensia, from 0% to 10.0% to more closely align their base salary with the base salary of peers. In addition, in connection with Mr. Sobey's promotion to Chief Operating Officer in April 2020, his annual base salary increased to \$500,000 to reflect the expansion of his role. According to information provided by the committee's compensation consultant, our CEO's base salary was approximately at the 50th percentile of our peer group companies. The base salaries for our other NEOs ranged from approximately the 40th percentile to the 60th percentile of our peer group companies.

Variable Cash Incentive Compensation

A substantial portion of each individual's potential short-term compensation is in the form of variable incentive cash compensation tied to committee-established goals. In fiscal 2020, Coherent maintained one incentive cash program under which executive officers were eligible to receive annual cash incentives, the 2020 Variable Compensation Plan ("2020 VCP").

2020 VCP

The 2020 VCP was designed as an "at risk" bonus compensation program to promote a focus on Coherent's growth and profitability. It provided an incentive compensation opportunity in line with targeted market rates to our NEOs. Under the 2020 VCP, participants were eligible to receive a bonus based on annual fiscal year performance. In setting the performance goals at the beginning of the fiscal year, the committee assessed the anticipated difficulty and importance to Coherent's success of achieving the performance goals.

The actual awards (if any) payable for the annual period depend on the extent to which actual performance met, exceeded or fell short of the goals approved by the committee. The 2020 VCP goals were tied to Coherent achieving targeted levels of revenue and Adjusted EBITDA dollars, with revenue weighted at 25% and Adjusted EBITDA weighted at 75%. Each performance metric is measured and paid out independently, but the revenue payout is capped at 100% achievement until Adjusted EBITDA reaches a minimum dollar target. Adjusted EBITDA is defined as operating income adjusted for VCP payouts, depreciation, amortization, stock compensation expenses, major restructuring charges and certain non-operating income or expense items, such as costs related to acquisitions. The committee also reviews the financial impact of mergers and acquisitions to determine if any adjustments in VCP are required.

The annual award had a potential payout range between zero and 200%.

In addition to a 100% target bonus based on the factors described above, the committee provided our CEO an additional target bonus of 20% of base salary based on the strategic operating plan process, which he met. The maximum payout under such additional target bonus was capped at 20%. The committee determined that Mr. Mattes earned this 20% of base salary target bonus.

Fiscal 2020 VCP Scale for NEOs

Revenue achievement for fiscal 2020 was \$1,430.6 million, which fell short of the threshold for a cash bonus payout and resulted in no cash bonus. Adjusted EBITDA achievement for fiscal 2020 was \$259.1 million, which fell short of the threshold for a cash bonus payout and resulted in no cash bonus.

Fiscal 2020 VCP Scale

Revenue (\$ in millions)	Payout
\$1,229.0 (actual)	0% (actual)
\$1,420.0 (threshold)	0%
\$1,480.0 (target)	100%
\$1,154.0	200%

Adjusted EBITDA (\$ in millions)	Payout
\$151.1 (actual)	0% (actual)
\$250.0 (threshold)	0%
\$291.0 (target)	100%
\$333.0	200%

The table below describes for each NEO under the 2020 VCP (i) the target percentage of base salary and (ii) the actual award earned for fiscal 2020. The potential award range for each NEO is 0% to 200% of the target award percentage of base salary.

Named Executive Officer	Target Percentage of Salary	Actual Payout (\$)	Actual Payout as a Percentage of Target
Andy Mattes	100% ⁽¹⁾	0	0%
Kevin Palatnik	75%	0	0%
Mark Sobey	75%	0	0%
Bret DiMarco	70%	0	0%
John Ambroseo	100%	0	0%
Thomas Merk	65%	0	0%

 Consists of VCP at 100% and 20% based on individual goals. Mr. Mattes earned \$170,003 based on achievement of his individual goals.

Equity Awards

We believe that equity awards provide a strong alignment between the interests of our executives and our stockholders. We seek to provide equity award opportunities that are consistent with our compensation philosophy, with the potential for increase for exceptional financial performance, consistent with the reasonable management of overall equity compensation expense and stockholder dilution. Finally, we believe that long-term equity awards are an essential tool in promoting executive retention. For fiscal 2020, our long-term incentive program included the grant of time-based RSUs and performance-based RSUs. These components provide a reward for individual performance and an incentive for future performance.

Our performance-based RSU grants are tied to the Company's performance and, as a result, may fluctuate from no vesting to vesting up to a maximum of 200% of target. The committee reviews a compensation overview prepared by its compensation consultant reflecting the intrinsic value of unvested equity awards and performance-based RSUs at target and projected values for all of the NEOs.

Fiscal 2020 Equity Grants

For fiscal 2020, the committee based the annual equity program on a combination of time-based and performance-based RSUs over a three-year period. In particular, the committee determined to measure achievement for the performance RSUs by the relative performance of Coherent's stock price in comparison to the Russell Index. The committee believed that using the Russell Index (in which Coherent was a member at the time of grant) as a proxy of total stockholder return directly aligns executive compensation with stockholder interests. The committee determined that both the performance-based and time-based RSU grants strengthen retention in that the time-based grants vest over three years with pro rata annual vesting and the performance-based RSU grants vest, assuming the performance threshold is met, in a single cliff vesting after a three-year period.

Performance-based standard RSU grants in fiscal 2020 vest solely upon the performance of Coherent's common stock price measured against the Russell Index. To achieve 100% vesting of the awards, our stock price must outperform the Russell Index by 2% during the defined performance period. If our stock outperforms that target, the award is increased 2% for each percentage point of outperformance (with a cap of a 200% vesting). If our stock underperforms the target, the award is decreased 2% for each of the first two percentage points of underperformance, and decreased 4% for each additional percentage point of underperformance (with a floor

of a 0% vesting). As a result, vesting decreases faster for failing to outperform the Russell Index than it increases for exceeding the target. The performance-based RSUs make up the largest potential portion of the equity grants for our CEO.

The following table summarizes some of the key features of our annual fiscal 2020 equity grants:

Fiscal 2020 Standard Equity Grants

Туре	RSUs and performance- based RSUs (PRSUs)
Vesting for RSUs	One-third each grant anniversary
Vesting for PRSUs	Single vesting date three years from grant
PRSU Metrics	100% tied to Russell Index Minimum vest: zero Target vest: 2% above Russell Index Maximum vest: 200% of target

For our CEO, *more than half* of his total equity awards are *performance-based*. Approximately 61% of his equity awards are performance-based and at maximum achievement that percentage increases to approximately 76%.

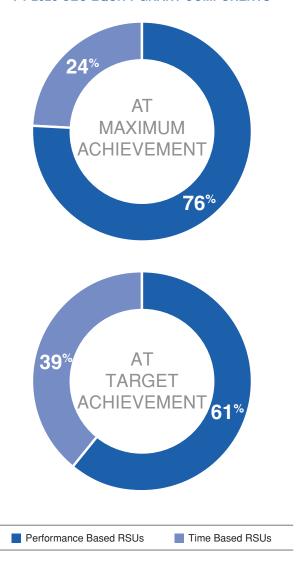
As an example, our performance-based design was seen in the vesting of the PRSU grants made in November 2016, which vested in the first quarter of fiscal 2020. Our common stock gained 39% as compared to the Russell Index, which gained 25% over the defined measurement periods at the beginning and end of the three-year vesting period. This out-performance resulted in 128% PRSU vesting.

In the event of a change of control of the Company, the performance-based grants will be measured, with respect to performance periods not yet completed, by the relative stock performance of Coherent in comparison to the Russell Index through the date of the change of control and such performance-based shares would, subject to the terms of the Change of Control Severance Plan, then convert to time-based vesting with a single vesting date at the three year anniversary of the grant.

The following charts show the *aggregate composition of equity grants* for fiscal 2020 to our CEO, at target and at *maximum* achievement under the terms of the performance-

based grants (excluding PRSUs measured by achievement of annual free cash flow):

FY 2020 CEO EQUITY GRANT COMPONENTS



The following table reflects equity grants made to the NEOs during fiscal 2020. The table includes a special one-time retention RSU with respect to 3,209 shares and with a single two-year cliff vest made to Mr. Palatnik in November 2019 as our CFO while the search for a CEO to succeed Mr. Ambroseo upon his retirement was underway. The table also includes PRSU grants made to Messrs. Sobey, DiMarco, and Palatnik made at the same time and the same performance measures as the PRSU grants made to Mr. Mattes as the new CEO in April 2020. These PRSU grants have a single three-year vest and were made by the committee, in consultation with its independent compensation consultant, to further support a

successful transition with Mr. Mattes as our new President and CEO.

Named Executive Officer	Time Based RSU Grants	Performance Based RSU Grants at Target	Performance Based RSU Grants Range (vesting dependent upon achievement)
Andy Mattes	16,165	25,057	0 - 50,114
Kevin Palatnik	8,663	6,261	0 - 12,522
Mark Sobey	5,133	7,806	0 - 15,612
Bret DiMarco	3,529	4,689	0 - 9,378
Thomas Merk	2,567	2,096	0 - 4,192

In addition to the standard time and performance-based RSUs described above, the committee in consultation with its independent compensation consultant determined in April 2020 that it was important during the COVID pandemic to provide performance-based RSUs based on the Company's free cash flow. The committee set \$40 million free cash flow (net cash provided by operating activities reduced by purchases of property and equipment) for fiscal year 2020 as the target for earning these performance-based RSUs. No vesting of such performance-based RSUs could occur unless more than the threshold of \$20 million free cash flow was achieved. Potential vesting with respect to free cash flow above the threshold \$20 million free cash flow target was linear to the target free cash flow amount.

The Company exceeded the target \$40 million free cash flow for fiscal 2020 and therefore the NEOs earned the target performance-based RSUs as set forth below:

Named Executive Officer	Performance-Based RSU Grants Tied to Free Cash Flow at Target
Andy Mattes	3,588
Kevin Palatnik	1,615
Mark Sobey	1,583
Bret DiMarco	1,300
Thomas Merk	1,066

Equity Award Practices

Equity grants to our employees are driven by our annual review process. Grant guidelines are based on competitive market practices. Typically, an eligible employee is granted equity at the first committee meeting after beginning employment and may be eligible for periodic grants thereafter. Eligibility for and the size of grants are influenced by the then-current guidelines for non-executive officer grants and the individual's performance or particular requirements at the time of hire. No option grants have been made to an employee since fiscal 2010.

In fiscal 2020 the committee and the Equity Committee granted an aggregate of 403,689 shares subject to time-based and performance-based restricted stock units (at maximum), representing approximately 1.66% of Coherent's outstanding common stock as of October 3, 2020 (excluding automatic and initial grants to directors). With the assistance of Compensia, the committee has reviewed this burn rate relative to peer practices and proxy advisory firm guidance and found that the total dilution was consistent with the median of peer practices and such guidance.

CEO and Executive Minimum Stock Ownership Guidelines

The committee adopted mandatory stock ownership guidelines for our CEO during fiscal 2012. During the first quarter of fiscal 2018, the committee adopted enhanced stock ownership guidelines increasing the value of shares our CEO must hold to at least five times base salary and making our Executive Vice Presidents and Senior Vice Presidents reporting to the CEO subject to stock ownership guidelines of one times such individual's base salary. In the event that our CEO or other officer does not satisfy the minimum requirements, then 50% of the net after-tax shares (e.g., exercised options/shares received on the vesting of RSUs) are required to be held until the guidelines are met. Mr. Mattes has until 2025 to meet the minimum stock ownership guidelines. Our other current NEOs exceeded the minimum stock ownership guidelines as of December 31, 2020.

Other Benefits

Retirement Plans

U.S. based executive officers are eligible to participate in our 401(k) Retirement Plan on the same terms as all other U.S. employees, including a 4% Company matching contribution. Our 401(k) Retirement Plan is intended to be a tax-qualified plan and therefore is subject to certain Internal Revenue Code limitations on the dollar amounts of deferrals and Company contributions that can be made to plan accounts. These limitations apply to our more highly-compensated employees (including the NEOs).

We maintain a Deferred Compensation Plan for certain employees and members of the Board. The Deferred Compensation Plan permits eligible participants to defer receipt of compensation pursuant to the terms of the plan. The Deferred Compensation Plan permits participants to contribute, on a pre-tax basis, up to 75% of their base salary earnings, up to 100% of their cash bonus pay and up to 100% of directors' annual retainer earned in the upcoming plan year.

We provide no matching or other additional contributions to such Deferred Compensation Plan. Plan participants may designate investments for deferrals in a variety of different deemed investment options. To preserve the tax-deferred status of deferred compensation plans, the IRS requires that the available investment alternatives be "deemed investments." Participants do not have an ownership interest in the funds they select; the funds are only used to measure the gains or losses that are attributed to the participant's deferral account over time.

The committee considers the Deferred Compensation Plan to be a reasonable and appropriate program because it promotes executive officer retention by offering a deferred compensation plan that is comparable to and competitive with what is offered by our peer group of companies.

Employee Stock Purchase Plan

Our stockholders have approved an employee stock purchase plan whereby employees can purchase shares for a discount, subject to various participation limitations. As employees, our NEOs are eligible to participate in this plan.

Severance and Change of Control Arrangements

Our Change of Control and Leadership Change Severance Plan (the "Change of Control Plan") provides certain benefits in the event of a change of control of Coherent for certain executives, including each of our NEOs. Benefits are provided if there is a change in ownership of Coherent, a change in effective control of Coherent, or a change in ownership of a substantial portion of Coherent's assets (in each case as construed under Section 409A of the Internal Revenue Code and the regulations thereunder) (a "change of control") and within two years thereafter (or within two months prior thereto) the participant's employment is terminated without cause or voluntarily terminates following a constructive termination event. The plan's provisions are, therefore, of the variety commonly referred to as "double-trigger." Importantly, the plan does not include any "gross up" provisions for the participants for the tax effects caused by any such benefits. The committee believes the Change of Control Plan serves as an important retention tool in the event of a pending change of control transaction.

In the first quarter of fiscal 2019, the committee reviewed and adopted substantially the same Change of Control Plan as adopted four years previously and determined to review the plan again in four years. Compensia assisted the committee in its review and analysis of the Change of Control Plan. The committee believes that reviewing the Change of Control Plan every four years allows for the right balance in providing

certainty for the participants while providing the committee with the opportunity to revise the plan consistent with corporate governance best practices, evolving peer group practices and regulatory changes.

In addition, in connection with the succession planning process related to the Company's announcement of Mr. Ambroseo's intention to retire as our President and CEO, the Company's Change of Control Plan was amended in fiscal 2019 to include a time-limited severance benefit for those Executive Vice Presidents and Senior Vice Presidents reporting directly to Mr. Ambroseo at the time of his announcement if their employment is terminated without cause or they terminate for good reason within the two-year period after the new CEO was appointed, which was April 6, 2020. The severance benefit includes 18 months of base and

bonus pay, an 18-month benefit stipend, 24 months of additional vesting credit for equity awards and a pro rata annual incentive for the year of termination. The Board believed that it was in the best interests of stockholders and the Company to adopt this change to reinforce continuity during a time of transition. As described in "Potential Payments Upon Termination or Change of Control" below, one NEO who is transitioning will be receiving severance in accordance with such transition severance benefits.

The committee does not consider the potential payments and benefits under these arrangements when making compensation decisions for our NEOs. These arrangements serve specific purposes unrelated to the determination of the NEOs' total direct compensation for a specific year.

Tax and Accounting Considerations

Accounting for Stock-Based Compensation—We account for stock-based compensation in accordance with the requirements of ASC 718. We also take into consideration ASC 718 and other generally accepted accounting principles in determining changes to policies and practices for our stock-based compensation programs.

Section 409A of the Internal Revenue Code—Section 409A imposes additional significant taxes in the event that an executive officer, director or service provider received "deferred compensation" that does not satisfy the requirements of Section 409A. We consider Section 409A in the design and operation of any plans.

Other Compensation Policies

To further align our executive compensation program with the interests of our stockholders, at the end of fiscal 2009, a committee of the Board approved a clawback policy for our CEO and CFO. This clawback policy provided that, in the event that there is an accounting restatement and there is a finding by the Board that such restatement was due to the gross recklessness or intentional misconduct of the CEO or CFO and it caused material noncompliance with any financial requirement, then Coherent shall reporting disgorgement of any portion of the bonus or other incentive or equity-based compensation related to such accounting restatement received by such individual during the 12-month period following the originally filed financial document.

As disclosed in the Company's fiscal 2019 proxy statement, the committee reviewed the Company's existing clawback policy during fiscal 2019 and, as a result of that review,

recommended a new policy to the Board, which the Board adopted in fiscal 2020. The new clawback policy expands potential recoupment of cash and equity incentive compensation to include all NEOs, as well as all employees of the Company holding the title of Senior Vice President or higher who report directly to our CEO. The new policy allows for the committee to recoup excess incentive compensation from such covered individuals in the event of a restatement of the Company's financial results if the committee determines that during the three-years prior to such restatement the covered individuals would have received less incentive compensation if it had been calculated based on the restated financials.

In addition, under our Insider Trading Policy, we have established a policy with respect to hedging or pledging Coherent securities.

Compensation and HR Committee Report

The Compensation and HR Committee of the Board has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Compensation and HR Committee recommended to the Board that the Compensation Discussion and Analysis be included in this proxy statement.

Respectfully submitted by the Compensation and HR Committee

Sandeep Vij, Chair Jay Flatley Pamela Fletcher Michael McMullen

RECONCILIATION TABLE—NON-GAAP EARNINGS PER SHARE FROM CONTINUING OPERATIONS

	I	isc	al Year	
	 2020		2019	2018
GAAP NET INCOME (LOSS) PER DILUTED SHARE FROM CONTINUING				
OPERATIONS	\$ (17.18)	\$	2.22	\$ 9.95
Stock-based compensation	1.61		1.30	1.11
Amortization of intangible assets	0.90		1.81	1.72
Restructuring charges and other	0.12		0.66	0.12
Non-recurring tax expense (benefit)	(0.01)		(0.04)	0.66
Costs related to acquisitions	_			0.03
Goodwill and other impairment/asset charges (recoveries)	17.56		(0.04)	0.03
Purchase accounting step up	_		0.01	0.02
NON-GAAP NET INCOME PER DILUTED SHARE FROM CONTINUING				
OPERATIONS	\$ 3.00	\$	5.92	\$ 13.64

RECONCILIATION TABLE—ADJUSTED EBITDA

		Fisc	al Year	
(in millions)	 2020		2019	2018
GAAP NET INCOME (LOSS) FROM CONTINUING OPERATIONS	\$ (414.1)	\$	53.8	\$ 247.4
Income tax expense	(28.6)		6.2	114.2
Interest and other income (expense), net	18.9		24.4	36.5
Depreciation and amortization	76.8		116.4	113.4
Costs related to acquisitions	_		_	0.7
Restructuring charges and other	3.6		22.7	3.9
Goodwill and other impairment/asset charges (recoveries)	449.7		(1.3)	8.0
Stock-based compensation	44.8		36.5	32.7
Purchase accounting step up	_		0.4	8.0
ADJUSTED EBITDA	\$ 151.1	\$	259.1	\$ 550.4

Compensation Committee Interlocks and Insider Participation

During fiscal 2020, the Compensation and HR Committee of the Board consisted of directors Vij (Chair), Flatley, Fletcher, and McMullen. None of the members of the committee has been or is an officer or employee of Coherent. None of our executive officers serve on the board of directors or compensation committee of a company that has an executive officer that serves on our Board or Compensation and HR Committee. No member of our Board is an executive officer of a company in which one of our executive officers serves as a member of the board of directors or compensation committee of that company.

Committee Independence

Each of the members of the committee qualifies as (i) an "independent director" under the requirements of The Nasdaq Stock Market, (ii) a "non-employee director" as defined in Rule 16b-3 under the Exchange Act, and (iii) an "independent outside director" as that term is defined by Institutional Shareholder Services.

SUMMARY COMPENSATION AND EQUITY TABLES

Fiscal 2020 Summary Compensation Table

The table below presents information concerning the total compensation of our NEOs for the fiscal years ended October 3, 2020, September 28, 2019 and September 29, 2018.

Non-Equity

Name and Principal Position	Fiscal Year	Salary (\$) ⁽¹⁾	Bonus (\$) ⁽²⁾	Stock Awards (\$) ⁽³⁾	Incentive Plan Compensation (\$) ⁽⁴⁾	All Other Compensation (\$) ⁽⁵⁾	Total (\$)
Andy Mattes, President and Chief Executive Officer ⁽⁶⁾	2020	375,967	500,000	5,713,268	170,003	5,600	6,764,838
John Ambroseo,	2020	825,011	0	599,881	0	11,348	1,436,240
Former President and	2019	820,203	0	4,056,096	0	11,146	4,887,445
Chief Executive Officer ⁽⁷⁾	2018	800,010	0	7,867,051	853,885	10,946	9,531,892
Kevin Palatnik,	2020	507,132	0	2,641,428	0	11,348	3,159,908
Executive Vice President	2019	484,439	0	1,247,657	0	11,146	1,743,242
and Chief Financial Officer ⁽⁸⁾	2018	438,083	0	1,568,031	306,283	10,946	2,323,343
Mark Sobey,	2020	477,604	0	2,287,515	0	11,348	2,776,467
Executive Vice President	2019	445,200	0	2,702,495	0	11,146	3,158,841
and Chief Operating Officer	2018	420,390	0	1,463,443	276,121	10,946	2,170,900
Bret DiMarco,	2020	432,311	0	1,504,001	0	11,348	1,947,660
Executive Vice President,	2019	398,081	0	2,507,454	0	11,146	2,916,681
Chief Legal Officer and	2018	387,116	0	1,149,941	235,280	10,946	1,783,283
Corporate Secretary							
Thomas Merk, Former Executive Vice President and General Manager, Industrial Lasers & Systems ⁽⁹⁾	2020	402,531	0	926,352	0	15,994	1,344,877

- (1) Reflects the dollar amount of salary earned in the applicable fiscal year.
- (2) Reflects Mr. Mattes' signing bonus which is subject to repayment to the Company if within the first year of Mr. Mattes' employment, he terminates employment without good reason or the Company terminates his employment for cause.
- (3) Amounts shown reflect the grant date fair value of awards granted in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718. Reflects unvested time-based and performance-based restricted stock units; there is no guarantee that the recipients will ultimately receive this amount, or any amount. See footnote 2 to the Grants of Plan-Based Awards table for additional information. Amounts in this column may not equal the sum of the awards included in the Grants of Plan-Based Awards table due to rounding. No stock options were granted to the NEOs in fiscal years 2020, 2019 and 2018.
- (4) Reflects the dollar amounts earned under the Variable Compensation Plan (VCP) during the applicable fiscal years.
- (5) Reflects a 401(k) company match earned during the applicable fiscal year for Messrs. Mattes, Ambroseo, Palatnik, Sobey, and DiMarco. For Mr. Merk, reflects a car lease benefit, which is customary in Europe and was historically provided by Rofin-Sinar.
- (6) Mr. Mattes joined the Company as our President and Chief Executive Officer effective April 6, 2020.
- (7) Effective April 6, 2020, Mr. Ambroseo retired from the role of the Company's President and Chief Executive Officer.
- (8) As previously noted, on August 20, 2020, the Company and Mr. Palatnik entered into an executive transition services agreement, pursuant to which Mr. Palatnik was to retire from the Company on February 28, 2021. On January 19, 2021 the Company announced the termination of such agreement and that Mr. Palatnik would remain in his current position.
- (9) Mr. Merk met the requirements for inclusion in the Summary Compensation Table for fiscal year 2020; however, Mr. Merk resigned from his officer position in October 2020. Mr. Merk was paid in Euros. For the purposes of this table, Euros were converted into US dollars using the Company's internal average P&L rate (1 Euro = \$1.118142) for fiscal year 2020.

Grants of Plan-Based Awards in Fiscal 2020

The following table shows all plan-based equity and non-equity incentive awards granted to our NEOs during fiscal 2020. Our NEOs did not receive any option awards during fiscal 2020.

			Under N	ted Future P Ion-Equity Ir Plan Awards	centive	Actual Payouts Under Non-Equity Incentive	Under	ed Future Equity Inc lan Award	centive	All Other Stock Awards: # of Shares of Stock or	Grant Date Fair
Name	Туре	Grant Date	Threshold (\$)	Target (\$)	Maximum (\$)	Plan Awards (\$) ⁽¹⁾	Threshold (\$)	Target (\$)	Maximum (\$)	Units (#)	Value (\$) ⁽²⁾
Andy Mattes	PRSU	04/17/2020					0	25,057	50,114		3,466,636
	PRSU	04/25/2020					0	3,588	3,588		424,999
	RSU	04/17/2020								16,165	1,821,633
	Annual bonus		0	1,020,015	1,870,028	170,003					
John Ambroseo	RSU	11/15/2019								1,283	199,943
	RSU	12/29/2019								1,206	199,931
	RSU	04/05/2020								2,146	200,007
	Annual bonus		0	825,011	1,650,022	0					
Kevin Palatnik	PRSU	11/15/2019					0	4,454	8,908		850,090
	PRSU	04/17/2020					0	1,807	3,614		249,999
	PRSU	04/25/2020					0	1,615	1,615		191,297
	RSU	11/15/2019								3,209	500,091
	RSU	11/15/2019								5,454	849,951
	Annual bonus		0	382,512	765,024	0					
Mark Sobey	PRSU	11/15/2019					0	4,192	8,384		800,085
	PRSU	04/17/2020					0	3,614	7,228		499,997
	PRSU	04/25/2020					0	1,583	1,583	5 400	187,506
	RSU	11/15/2019		.==	750.047					5,133	799,927
D 1 D'M	Annual bonus	44/45/0040	0	375,008	750,017	0	0	0.000	F 704		550.050
Bret DiMarco	PRSU PRSU	11/15/2019					0	2,882	5,764		550,058
	PRSU	04/17/2020					0	1,807	3,614		249,999
	RSU	04/25/2020 11/15/2019					0	1,300	1,300	3,529	153,985
	Annual bonus	11/15/2019	0	308,002	616.004	0				3,329	549,959
Thomas Merk	PRSU	11/15/2019	U	300,002	616,004	U	0	2,096	4,192		400,043
THOMAS WELK	PRSU	04/25/2020					0	1,066	1,066		126,268
	RSU	11/15/2019					U	1,000	1,000	2,567	400,041
	Annual bonus	11/10/2019	0	261,645	523,290	0				2,007	400,041

⁽¹⁾ Failure to meet a minimum level of performance resulted in no bonus paid out under the 2020 Variable Compensation Plan. For the 2020 fiscal year, under the terms of Mr. Mattes' employment agreement, target bonus equal to 100% of his full annual base salary was based on VCP metrics, which were not met. Target bonus equal to 20% of his full annual base salary was based on individual goals (with a maximum award of 20%). These individual goals were met, resulting in an individual bonus payment of \$170,003.

⁽²⁾ Reflects the dollar amount recognized for financial statement reporting purposes (disregarding an estimate of forfeitures related to service-based vesting conditions) for fiscal 2020 in accordance with ASC 718, and includes grants made in fiscal 2020. The assumptions used in the valuation of these awards are set forth in Note 12 "Employee Stock Award and Benefit Plans" of the Notes to the Consolidated Financial Statements in our annual report on Form 10-K for fiscal 2020, filed with the SEC on December 1, 2020. For informational purposes, if the maximum level of performance for the PRSU awards was achieved, the value, calculated by multiplying the closing price of the Company's common stock on the date of grant by the number of shares issuable upon achievement of the maximum level of performance under (i) the PRSU granted on November 15, 2019 is \$1,388,223, \$1,306,566, \$898,262 and \$653,281, for Messrs. Palatnik, Sobey, DiMarco and Merk, respectively; and (ii) the PRSU granted on April 17, 2020 is \$5,647,347, \$407,262, \$814,523 and \$407,262, for Messrs. Mattes, Palatnik, Sobey and DiMarco, respectively. These amounts do not correspond to the actual value, if any, that will be recognized by the NEOs. See "Compensation Discussion and Analysis—Equity Awards" for a description of the PRSUs.

Option Exercises and Stock Vested in Fiscal 2020

The table below sets forth certain information for each NEO regarding the exercise of options and the vesting of stock awards during fiscal 2020, including the aggregate value realized upon such exercise or vesting.

	Option	n Awards	Stock Awards		
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#) ⁽¹⁾	Value Realized on Vesting (\$) ⁽²⁾	
Andy Mattes	_	_	3,588	394,680	
John Ambroseo	_	_	57,985	8,911,463	
Kevin Palatnik	_	_	12,604	1,888,237	
Mark Sobey		_	11,746	1,756,664	
Bret DiMarco	_	_	10,016	1,500,267	
Thomas Merk	_	_	8,162	1,223,583	

⁽¹⁾ Includes 3,588, 1,615, 1,583, 1,300 and 1,066 shares for Messrs. Mattes, Palatnik, Sobey, DiMarco and Merk, respectively, that vested on October 3, 2020 as a result of fiscal 2020 free cash flow performance. Such shares were settled on December 1, 2020, upon the performance metric being certified by the Compensation and HR Committee based on numbers set forth in our annual report on Form 10-K for fiscal 2020, filed with the SEC on December 1, 2020.

⁽²⁾ Reflects the market price of our common stock on the vesting date.

Outstanding Equity Awards at Fiscal 2020 Year-End

The following table presents information concerning outstanding equity awards held by each NEO as of October 3, 2020.

		Option Awards			Stock Awards				
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) exercisable	Number of Securities Underlying Unexercised Options (#) unexercisable		Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#) ⁽¹⁾	Market Value of Shares or Units of Stock That Have Not Vested (\$) ⁽²⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Andy Mattes	04/17/2020	_	_	_	_	_	_	50,114 ⁽³	5,512,540
	04/17/2020	_	_	_	_	16,165	1,778,150	_	_
John Ambroseo	11/13/2018	_	_	_	_		_	44,998(4	4,949,780
	11/13/2018	_	_	_	_	7,648	841,280	— 	_
	11/03/2017	_	_	_	_			37,582 ⁽⁵	4,134,020
K : D ()	11/03/2017		_	_	_	2,497	274,670		
Kevin Palatnik	04/17/2020	_	_	_	_	_	_	3,614 ⁽³⁾	
	11/15/2019	_	_	_	_	_		8,908 ⁽⁶⁾	979,880
	11/15/2019	_	_	_	_	3,209	352,990	_	_
	11/15/2019	_	_	_	_	5,454	599,940		
	11/13/2018	_	_	_	_		- 200 540	10,184 ⁽⁴⁾	1,120,240
	11/13/2018	_	_	_	_	3,514	386,540	— E 040/5	
	11/03/2017	_	_	_	_	_	400.000	5,010 ⁽⁵	551,100
Marila Oalaas	11/03/2017	_	_	_	_	999	109,890	7 220/3	705.000
Mark Sobey	04/17/2020	_	_	_	_	_	_	7,228 ⁽³	
	11/15/2019	_	_	_	_		EC4 620	8,384 ⁽⁶⁾	922,240
	11/15/2019	_	_	_	_	5,133	564,630	_	_
	04/12/2019	_	_	_	_	11,062	1,216,820	7.956 ⁽⁴	075.400
	11/13/2018	_	_	_	_	2.745	204.050	7,956	875,160
	11/13/2018	_	_	_	_	2,745	301,950	4,676 ⁽⁵	<u> </u>
	11/03/2017	_	_	_	_	932	102 520	4,0700	514,360
Bret DiMarco	11/03/2017 04/17/2020	_	_		_	932	102,520	3,614 ⁽³	397,540
DIEL DIMAICO	11/15/2019	_	_	_	_	_	_	5,764 ⁽⁶	· · · · · · · · · · · · · · · · · · ·
	11/15/2019	_	_	_	_	3,529	388,190	5,764	034,040
	04/12/2019	_	_	_	_	11,062		_	_
	11/13/2018	_	_	_	_	11,002	1,216,820	6,364 ⁽⁴	700,040
	11/13/2018	_	_			2,196	241,560	0,304	700,040
	11/03/2017	_	_			2,130	241,500	3.674 ⁽⁵	404,140
	11/03/2017				_	732	80,520	3,074	404,140
Thomas Merk	11/05/2017			_	_	132	- 00,320	4,192 ⁽⁶	461,120
THOIHAS WEIK	11/15/2019	_	_		_	2,567	282,370	4,192	401,120
	11/13/2019	_		_	_	2,307	202,370	5,092 ⁽⁴	560,120
	11/13/2018	_		_	_	1,757	193,070	3,092	300,120
	11/03/2017	_		_	_	1,737	193,010	3,340 ⁽⁵	367.400
	11/03/2017	_		_	_	666	73,260	3,340	307,400
	11/03/2017	_	_	_	_	000	13,200	_	_

⁽¹⁾ Generally, time-based RSU grants vest ½ per year on each anniversary of the grant date. Mr. Palatnik's 3,209 time-based RSUs granted on November 15, 2019 have a November 15, 2021 vest date, and Messrs. Sobey and DiMarco's 11,062 time-based RSUs granted on April 12, 2019 have an April 12, 2022 vest date. Mr. Merk will vest in certain time-based RSUs that would otherwise vest within 24 months of his employment termination in accordance with the Leadership Change severance benefits under the Company's Change of Control and Leadership Change Severance Plan as described in "Potential Payments Upon Termination or Change of Control" below.

⁽²⁾ Market value is determined by multiplying the number of shares by \$110.00, the closing price of our common stock on October 2, 2020, the last trading day of fiscal 2020.

- (3) The performance-based RSU vesting determination date is April 6, 2023. The performance-based RSUs will vest in an amount which is 0-200% subject to the achievement of certain performance metrics. The amount reflected in the table is the maximum amount of 200%.
- (4) The performance-based RSU vesting determination date is November 13, 2021. The performance-based RSUs will vest in an amount which is 0-200% subject to the achievement of certain performance metrics. The amount reflected in the table is the maximum amount of 200%.
- (5) The performance-based RSU vesting determination date was November 3, 2020. The performance-based RSUs could have vested in an amount which is 0-200% subject to the achievement of certain performance metrics. The amount reflected in the table is the maximum amount of 200%; however, such performance-based RSUs did not vest since the performance metric was not achieved.
- (6) The performance-based RSU vesting determination date is November 15, 2022. The performance-based RSUs will vest in an amount which is 0-200% subject to the achievement of certain performance metrics. The amount reflected in the table is the maximum amount of 200%.

Fiscal 2020 Non-Qualified Deferred Compensation

For a description of our Deferred Compensation Plan, see "Compensation Discussion and Analysis—Retirement Plans." The following table presents information regarding the non-qualified deferred compensation activity for each NEO during fiscal 2020 other than Mr. Merk who does not participate in our Deferred Compensation Plan:

Name	Executive Contributions in Last FY (\$) ⁽¹⁾	Registrant Contributions in Last FY (\$) ⁽²⁾	Aggregate Earnings in Last FY (\$)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance at Last FYE (\$) ⁽³⁾
Andy Mattes	78,463	_	4,348	_	82,811
John Ambroseo	_	_	1,641,326	_	14,549,955
SRP ⁽⁴⁾	_	_	303,012	_	2,549,962
Kevin Palatnik	_	_	54,233	_	842,600
Mark Sobey	_	_	20,459	(17,185)	1,949,189
Bret DiMarco	_	_	5,611	_	175,299

- (1) All amounts reported as executive contributions are executive elective deferrals included in the Fiscal 2020 Summary Compensation Table, as salary for fiscal 2020.
- (2) Company contributions to our Deferred Compensation Plan were terminated on December 31, 2010.
- (3) The deferred compensation in a participant's account is fully vested and is credited with positive or negative investment results based upon plan investment options selected by the participant. The balance reflects contributions previously reported in the Summary Compensation Table to the extent the executive was a Named Executive Officer at the time of such contributions.
- (4) Amounts include account balances (including earnings) from the Supplementary Retirement Plan (SRP), which was suspended on December 31, 2004. The Deferred Compensation Plan is the only current non-qualified deferred compensation plan available for executive management.

Potential Payments Upon Termination or Change of Control

The following table shows the potential payments and benefits that we (or our successor) would be obligated to make or provide upon termination of employment of our current executive officers pursuant to the terms of the Change of Control and Leadership Change Severance Plan and our CEO's employment agreement. For purposes of this table, it is assumed that such NEO's employment terminated at the close of business on October 2, 2020 (the last business day of fiscal 2020). These payments are conditioned upon the execution of a form release of claims by the NEO in favor of us. The amounts reported below do not include the nonqualified deferred compensation distributions that would be made to the NEOs following a termination of employment (for those amounts and descriptions, see the prior table) nor amounts that were earned as of the end of fiscal 2020. There can be no assurance that a triggering event would produce the same or similar results as those estimated below if such event occurs on any other date or at any other price, or if any other assumption used to estimate potential payments and benefits is not correct. Due to the number of factors that affect the nature and amount of any potential payments or benefits, any actual payments and benefits may be different. These are aggregate payments and do not reflect such individual's net after tax benefit. No officer is entitled to any "gross up" to offset the impact of IRS Code Section 280G.

NEO	Nature of Benefit	Termination Other Than for Change of Control or Leadership Change (\$)	Leadership Change Termination (\$)	Change of Control Termination (\$)
			(Ψ)	
Andy Mattes	Salary Severance(1)	1,700,026	_	2,541,538
	Bonus Severance(1)	2,040,031	_	3,049,846
	Time-Based Equity Compensation Acceleration ⁽²⁾	_	_	1,778,150
	Performance-Based Equity Compensation Acceleration	40.500	_	2,756,270
	Aggregate Healthcare Related Monthly Payment ⁽³⁾	49,500	_	99,000
Karin Dalataik	TOTAL BENEFIT	3,789,557	705.004	10,224,804
Kevin Palatnik	Salary Severance ⁽¹⁾	_	765,024	1,020,032
	Bonus Severance ⁽¹⁾	_	573,768	765,024
	Time-Based Equity Compensation Acceleration ⁽²⁾	_	1,249,380	1,449,360
	Performance-Based Equity Compensation Acceleration	_	1,202,092	1,248,830
	Aggregate Healthcare Related Monthly Payment ⁽³⁾	_	49,500	66,000
Maula Oalaas	TOTAL BENEFIT	_	3,839,764	4,549,246
Mark Sobey	Salary Severance ⁽¹⁾	_	750,017	1,000,022
	Bonus Severance ⁽¹⁾	_	562,513	750,017
	Time-Based Equity Compensation Acceleration ⁽²⁾	_	1,997,783	2,185,920
	Performance-Based Equity Compensation Acceleration	_	1,217,174	1,296,240
	Aggregate Healthcare Related Monthly Payment ⁽³⁾	_	49,500	66,000
	TOTAL BENEFIT	_	4,576,987	5,298,199
Bret DiMarco	Salary Severance ⁽¹⁾	_	660,005	880,006
	Bonus Severance ⁽¹⁾	_	462,003	616,004
	Time-Based Equity Compensation Acceleration ⁽²⁾	_	1,797,767	1,927,090
	Performance-Based Equity Compensation Acceleration	_	823,876	865,810
	Aggregate Healthcare Related Monthly Payment ⁽³⁾	_	49,500	66,000
	TOTAL BENEFIT	_	3,793,151	4,354,910

⁽¹⁾ Reflects salary as in effect as of October 2, 2020. Bonus severance is based on target bonus as a percentage of salary as in effect as of October 2, 2020. The multiplier for a Change of Control Termination is 2.99 for the CEO and 2.0 for other NEOs. The multiplier for a Leadership Change Termination is 1.5. Note that for purposes of this table, the Company used actual salary rate in the payroll system, which due to rounding is immaterially different than the annual rate described (e.g. with regards to Mr. Mattes, the difference is approximately \$13).

- (2) Equity Compensation Acceleration represents the value of time-based restricted stock units and performance-based restricted stock units, in each case at the closing stock price (\$110.00) on October 2, 2020 (the last trading day of fiscal year 2020) that would become vested because of a termination of employment on October 2, 2020 assuming a Change in Control or Leadership Change. 100% of the time-based restricted stock units with respect to a Change of Control termination and those time-based restricted stock units that would vest within 24 months after the Leadership Change termination are accelerated. The value of accelerated restricted stock units is calculated by multiplying the number of unvested restricted stock units subject to acceleration by the closing stock price on October 2, 2020. This assumes vesting of the performance-based restricted stock units with a performance period ending in November 2021 and November 2022 at target achievement and in the event of a Leadership Change Termination, pro rata vesting of such restricted stock units with a performance period ending November 2022 reflecting an additional 24 month period after employment. The amounts reflected for Equity Compensation Acceleration do not reflect any value for the performance-based restricted stock units with a performance period ending in November 2020 since the performance goal for those units was not met and, therefore, no units vested. The amounts reflected for Equity Compensation Acceleration do not reflect any applicable taxes, just gross proceeds. Since the table assumes a triggering event as of the last business day of the fiscal year, only those restricted stock units outstanding to which the executives did not have a right as of that date are included in the table.
- (3) Aggregate Healthcare Related Monthly Payment is a monthly payment of \$2,750 in lieu of receiving Company-subsidized COBRA benefits, life insurance premiums and/or other welfare benefits, multiplied by 36 months for our CEO and for our other NEOs, 24 months in a Change of Control termination or 18 months in a Leadership Change termination.

John Ambroseo retired from his role as President and CEO and a member of the Board, effective April 6, 2020. Upon his retirement, Mr. Ambroseo transitioned to the role of a Special Advisor to the Company. This transition was effected pursuant to a transition and retirement agreement that was entered into by Mr. Ambroseo and the Company in April 2019. The transition and retirement agreement provides for continuation of Mr. Ambroseo's employment through December 1, 2021, with a continuation of his base salary at \$68,750 per month through April 13, 2021 and a base salary of \$10,000 per month thereafter through December 1, 2021, continued vesting in outstanding equity awards through December 1, 2021 and eligibility for Change in Control benefits under the Company's Change of Control and Leadership Change Severance Plan as though he continued as Chief Executive Officer if a Change of Control occurs before his retirement date. If a Change of Control and termination of employment occurred on October 2, 2020, Mr. Ambroseo would have been entitled to salary severance of \$2,466,783, bonus severance of \$2,466,783, equity compensation acceleration of \$1,115,950 in time-based restricted stock units and \$2,474,890 in performance-based restricted stock units (assuming target performance and the October 2, 2020 stock price) and aggregate health care related monthly payments of \$99,000 for a total value of \$8,623,406.

On August 20, 2020, the Company and Kevin Palatnik, entered into an executive transition services agreement, pursuant to which Mr. Palatnik was to retire from the Company on February 28, 2021. The executive transition services agreement provided that Mr. Palatnik was to transition to a special advisor to the Company in connection with the appointment of a successor Chief Financial Officer. Under the executive transition services agreement, Mr. Palatnik would have received the "Change in Leadership Severance Benefits" but not the "Change of Control Severance Benefits" under the Company's Change of Control and Leadership Change Severance Plan, subject to the requirements thereof to provide an effective release. Mr. Palatnik's "Change in Leadership Severance Benefits" (determined as of October 2, 2020) are set forth in the table above. As previously noted, the Company and Mr. Palatnik terminated the executive transition services agreement on January 18, 2021. Therefore, the table above also sets forth Mr. Palatnik's "Change of Control Severance Benefits" (determined as of October 2, 2020) under the Company's Change of Control and Leadership Change Severance Plan even though Mr. Palatnik would not have been eligible for such benefits while his executive transition services agreement was in effect.

The Company and Thomas Merk entered into a termination agreement pursuant to which Mr. Merk resigned from his officer position in October 2020 and terminated all employment relationships with the Company effective December 31, 2020. Under the termination agreement, Mr. Merk will basically receive the "Change in Leadership Severance Benefits" under the Company's Change of Control and Leadership Change Severance Plan in severance and compensation for the period after his officer resignation, subject to the requirements thereof to provide an effective release. Mr. Merk's "Change in Leadership Severance Benefits" included continued payment of his full salary through December 31, 2020, severance payment of €845,055 (valued at \$990,286 using an October 2, 2020 currency conversion rate of 1 Euro = \$1.17186) and vesting of the 2,589 time-based restricted

Summary Compensation and Equity Tables

stock units which were scheduled to vest within the 24 month period after his termination of employment (valued at \$284,790 based on the October 2, 2020 stock price) and the continued ability to earn performance-based restricted stock units based on actual Company performance during the performance period ending November 13, 2021 (target of 2,546 performance-based restricted stock units valued at \$280,060 based on the October 2, 2020 stock price) and performance-based restricted stock units based on actual Company performance for the performance period ending November 15, 2021 (target of 2,096 performance-based restricted stock units valued at \$230,560 based on the October 2, 2020 stock price).

PAY RATIO

As provided for by the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC adopted a rule requiring companies to disclose the ratio of the median employee's total annual compensation relative to total annual compensation of the CEO. The fiscal 2020 total annualized compensation for our CEO, for purposes of this disclosure, as discussed below, was \$7,244,632. We estimate that the fiscal 2020 total annual compensation for the median of all employees, excluding our CEO, was \$67,064. The resulting ratio of our CEO's total annual compensation to that of the median of all employees, excluding our CEO, for fiscal 2020 is approximately 108 to 1.

For purposes of reporting annual total compensation and the ratio of annual total compensation of the CEO to the median employee, both the CEO and median employee's annual total compensation were calculated consistent with the disclosure requirements of executive compensation under the Summary Compensation Table.

For fiscal year 2020, the total compensation reported in the "Total" column of the Summary Compensation Table for our Chief Executive Officer, Mr. Mattes, was \$6,764,838. Since Mr. Mattes was appointed Chief Executive Officer effective April 6, 2020, we annualized his Salary, Non-Equity Incentive Plan Compensation and Company contributions to the 401(k) Retirement Plan, disclosed in the Fiscal 2020 Summary Compensation Table, and added the values set forth in the Fiscal 2020 Summary Compensation Table of his Bonus, Stock Awards, and other components of All Other Compensation to arrive at a value of \$7,244,632, used for the ratio of annual total compensation for our CEO to the annual total compensation for our median employee.

We identified the median employee by (i) aggregating for each employee employed on October 3, 2020 (our fiscal year end) (A) annual base salary for salaried employees (or hourly rate

multiplied by estimated work schedule, for hourly and seasonal employees) and (B) target incentive compensation, (ii) converting amounts from local currency to U.S. dollars and (iii) ranking this compensation measure for our employees other than our CEO from lowest to highest. Because we had an even number of employees (excluding our CEO) on the determination date, two employees were identified as the median compensated employees. We reviewed the compensation of these two employees as well as the compensation of five employees immediately above and below, to further analyze employee median compensation for consistency with that of other employees near the median. For these twelve employees, we calculated total annual compensation for such employees using the same methodology used to calculate the "Total" column of the Fiscal 2020 Summary Compensation Table. We then selected from among the two median compensated employees, a United States employee whose compensation was consistent with that of the twelve employees reviewed.

The pay ratio reported above is a reasonable estimate calculated in a manner consistent with SEC rules based on our internal records and the methodology described above. The SEC rules for identifying the median compensated employee and calculating the pay ratio based on that employee's total annual compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. Therefore, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates. assumptions in calculating their own pay ratios.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Review, Approval or Ratification of Related Person Transactions

In accordance with the charter of the Audit Committee, the members of the Audit Committee, all of whom are independent directors, review and approve in advance any proposed related person transactions. Additionally, from time to time the Board may directly consider these transactions. For purposes of these procedures, the individuals and entities that are considered "related persons" include:

- · Any of our directors, nominees for director and executive officers;
- Any person known to be the beneficial owner of five percent or more of our common stock (a "5% Stockholder"); and
- Any immediate family member, as defined in Item 404(a) of Regulation S-K, of a director, nominee for director, executive officer
 and 5% Stockholder. We will report all such material related person transactions under applicable accounting rules, federal
 securities laws and SEC rules and regulations.

Related Person Transactions

We have entered into indemnification agreements with each of our executive officers and directors. Such indemnification agreements require us to indemnify these individuals to the fullest extent permitted by law. We also intend to execute these agreements with our future directors and officers.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee is responsible for overseeing our accounting and financial reporting processes and audits of our financial statements, including reviewing and approving the fees for the performance of the audit by our independent auditors. As set forth in its charter, the Audit Committee acts only in an oversight capacity and relies on the work and assurances of both management, which has primary responsibilities for our financial statements and reports, as well as the independent registered public accounting firm that is responsible for expressing an opinion on the conformity of our audited financial statements to generally accepted accounting principles.

The Audit Committee met ten (10) times during fiscal 2020. In the course of these meetings, the Audit Committee met with management, the internal auditors and our independent registered public accounting firm and reviewed the results of the internal and external audit examinations, evaluations of our internal controls and the overall quality of our financial reporting.

The Audit Committee believes that a candid, substantive and focused dialogue with the internal auditors and the independent registered public accounting firm is fundamental to the Audit Committee's oversight responsibilities. To support this belief, the Audit Committee periodically meets separately with the internal auditors and the independent auditors, without management present. In the course of its discussions in these meetings, the Audit Committee asked a number of questions intended to bring to light any areas of potential concern related to our financial reporting and internal controls. These questions include:

- Are there any significant accounting judgments, estimates or adjustments made by management in preparing the financial statements that would have been made differently had the auditors themselves prepared and been responsible for the financial statements;
- Based on the auditors' experience, and their knowledge of our business, do our financial statements fairly present to investors, with clarity and completeness, our financial position and performance for the reporting period in accordance with generally accepted accounting principles and SEC disclosure requirements;
- Based on the auditors' experience, and their knowledge of our business, have we implemented internal controls and

internal audit procedures that are appropriate for our business.

The Audit Committee approved the engagement of Deloitte & Touche LLP as our independent registered public accounting firm for fiscal 2020, including the fees to be paid for their audit work, and reviewed with the internal auditors and independent registered public accounting firm their respective overall audit scope and plans. In approving Deloitte & Touche LLP, the Audit Committee considered the qualifications of Deloitte & Touche LLP and discussed with Deloitte & Touche LLP their independence, including a review of the audit and non-audit services provided by them to us. The Audit Committee also discussed with Deloitte & Touche LLP the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board (PCAOB) and the Commission, and it received the written disclosures and the letter from Deloitte & Touche LLP required by the applicable requirements of the Public Company Accounting Oversight Board regarding Deloitte & Touche LLP's communications with the Audit Committee concerning independence.

Management has reviewed and discussed the audited financial statements for fiscal 2020 with the Audit Committee, including a discussion of the quality and acceptability of the financial reporting, the reasonableness of significant accounting judgments and estimates and the clarity of disclosures in the financial statements. In connection with this review and discussion, the Audit Committee asked a number of follow-up questions of management and the independent registered public accounting firm to help give the Audit Committee comfort in connection with its review.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board that the audited financial statements be included in the annual report on Form 10-K for the fiscal year ended October 3, 2020, for filing with the SEC.

Respectfully submitted by the Audit Committee.

Steve Skaggs, Chair Beverly Kay Matthews Garry Rogerson

OTHER MATTERS

We know of no other matters to be submitted to the meeting. If any other matters properly come before the meeting, it is the intention of the persons named in the enclosed Proxy to vote the shares they represent as the Board may recommend.

Dated: March 19, 2021

By Order of the Board of Directors

Bret DiMarco

Executive Vice President, Chief Legal Officer and

Corporate Secretary

APPENDIX A

COHERENT, INC. EMPLOYEE STOCK PURCHASE PLAN Amended and restated as of May 6, 2021

The following constitutes the provisions of the Employee Stock Purchase Plan (herein called the "Plan") of Coherent, Inc. (herein called the "Company").

1. <u>Purpose</u>. The purpose of the Plan is to provide employees of the Company and its subsidiaries with an opportunity to purchase Common Stock of the Company through payroll deductions. It is the intention of the Company to have the Plan qualify as an "Employee Stock Purchase Plan" under Section 423 of the Internal Revenue Code of 1986. The provisions of the Plan shall, accordingly, be construed so as to extend and limit participation in a manner consistent with the requirements of that Section of the Code.

Definitions.

- (a) "Base pay" or "base salary" means regular straight-time earnings and commissions, excluding payments for overtime, shift premiums, incentive compensation, bonuses and any other special payments.
- (b) "Employee" means any person, including an officer, who is customarily employed for at least twenty (20) hours (or such lesser number of hours determined by the Company) per week by the Company or its subsidiaries (50% or more of whose voting shares are owned directly or indirectly by the Company) unless the Company designates a subsidiary as not participating in the Plan.

3. Eligibility.

- (a) Any employee as defined in paragraph 2 who shall be employed on the date the employee's participation in the Plan is effective shall be eligible to participate in the Plan, subject to limitations imposed by Section 423(b) of the Internal Revenue Code of 1986.
- (b) Any provisions of the Plan to the contrary notwithstanding, no employee shall be granted an option under the Plan (i) if, immediately after the grant, such employee would own shares and/or hold outstanding options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of the Company, or (ii) which permits the participant's rights to purchase shares under all employee stock purchase plans of the Company and its subsidiaries to accrue at a rate which exceeds Twenty Five Thousand Dollars (\$25,000) for each calendar year in which such option is outstanding at any time, where the value of the option is calculated as the fair market value of the shares (determined at the time such option is granted).
- 4. Offering Dates. The Plan shall be implemented by two offerings during each fiscal year, each of six months duration, with Offering I commencing on or about May 1 of each year and Offering II commencing on or about November 1 of each year. Notwithstanding the foregoing, in lieu of the offering periods set forth in the preceding sentence, the Board may establish any offering period that does not exceed 27 months and is consistent with Section 423 of the Internal Revenue Code of 1986.

5. Participation.

- (a) An eligible employee may enroll in the Plan by completing a subscription agreement authorizing payroll deduction on the form provided by the Company and submitting prior to the applicable offering date, the subscription agreement and any other information required by the Company in the form and manner and in accordance with procedures designated by the Company.
- (b) Payroll deductions for a participant shall commence on the first payroll following the offering date and shall end on the termination date of the offering to which such authorization is applicable, unless sooner terminated by the participant as provided in paragraph 10 or otherwise provided by the Company.

6. Payroll Deductions.

- (a) At the time a participant files the participant's subscription agreement, the participant shall elect to have payroll deductions made on each payday during the offering period. Unless the Company determines otherwise, the amount of payroll deductions elected to be made shall not be greater than ten percent (10%) of the base pay which the participant receives on such payday nor less than a \$10 deduction per payday.
- (b) All payroll deductions made by a participant shall be credited to a book-keeping account under the Plan. A participant may not make any additional payments into such account.
- (c) A participant may discontinue the participant's payroll deductions to the Plan as provided in paragraph 10, or may lower, but not increase, the rate of the participant's payroll deductions (within the limitations set forth in subparagraph (a) above) during the offering by completing or filing with the Company a new authorization for payroll deduction. Unless the Company determines otherwise, the change in rate shall be effective within fifteen (15) days following the Company's receipt of the new authorization.

7. Grant of Option.

- (a) At the beginning of each offering period, each eligible employee shall be granted an option to purchase that number of shares of the Company's Common Stock determined by dividing such employee's payroll deductions accumulated prior to the exercise date and retained in the eligible employee's account as of the exercise date by the applicable option price determined in accordance with paragraph 7(b); provided that in no event will an eligible employee be permitted to purchase during any offering period more than ten thousand (10,000) shares of the Company's Common Stock, subject to adjustment as provided in paragraph 18 and provided further that such purchase will be subject to the limitations set forth in paragraphs 3(b) and 12 hereof. Fair market value of a share of the Company's Common Stock shall be determined as provided in paragraph 7(b) herein.
- (b) The option price per share of such shares shall be the lower of: (i) 85% of the fair market value of a share of the Common Stock of the Company at the commencement of the offering period; or (ii) 85% of the fair market value of a share of the Common Stock of the Company at the time the option is exercised at the termination of the offering period. The fair market value of the Company's Common Stock on said dates shall be determined by the Company's Board of Directors in the exercise of their discretion in good faith.
- 8. Exercise of Option. Unless a participant withdraws from the Plan as provided in paragraph 10 and subject to the limitations set forth in paragraph 12, the participant's option for the purchase of shares will be exercised automatically at the end of the offering period, and the maximum number of full shares subject to option will be purchased for the participant at the applicable option price with the applicable amount of the accumulated payroll deductions in the participant's account. During the participant's lifetime, a participant's option to purchase shares hereunder is exercisable only by the participant. Any cash remaining to the credit of a participant's account under the Plan after a purchase by the participant of shares at the termination of each offering period, or which is insufficient to purchase a full share of Common Stock of the Company, shall be returned to said participant.
- 9. Rights as a Stockholder. A participant shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, the shares of the Company's Common Stock purchased upon exercise of the participant's option under the Plan until the date of the issuance of the shares of the Company's Common Stock to the participant.

10. Withdrawal; Termination of Employment.

(a) A participant may withdraw all but not less than all the payroll deductions credited to the participant's account under the Plan for an offering at any time prior to the end of the applicable offering period by giving notice to the Company in the manner prescribed by the Company. All of the participant's payroll deductions credited to the participant's account for the offering from which the participant has withdrawn will be paid to the participant promptly after receipt of the participant's notice of withdrawal and the participant's option for the current offering period will be automatically terminated, and no further payroll deductions for the purchase of shares will be made during the applicable offering period.

- (b) Upon termination of the participant's employment prior to the end of an offering period for any reason, including retirement or death, the payroll deductions credited to the participant's account will be returned to the participant and the participant's option will be automatically terminated.
- (c) In the event an employee fails to remain in the employ of the Company or its subsidiaries customarily for at least twenty (20) hours (or such lesser number of hours determined by the Company) per week during the offering period in which the employee is a participant, the employee will be deemed to have elected to withdraw from the Plan and the payroll deductions credited to the employee's account will be returned to the employee and the employee's option terminated.
- (d) A participant's withdrawal from an offering will not have any effect upon the participant's eligibility to participate in any other offering or in any similar plan which may hereafter be adopted by the Company.
- 11. No Interest. To the extent that a participant's payroll deductions are refunded pursuant to the provisions of the Plan, no interest shall be paid on said refundable amount.
- 12. Stock. The maximum number of shares of the Company's Common Stock which shall be made available for sale under the Plan on or after May 6, 2021 shall be 250,000 shares plus the number of shares remaining available under the Plan after the October 31, 2020 purchase, subject to adjustment upon changes in capitalization of the Company as provided in paragraph 18. The shares to be sold to participants under the Plan may, at the election of the Company, be either treasury shares or shares authorized but unissued. If the total number of shares which would otherwise be subject to options granted pursuant to paragraph 7(a) hereof at the beginning of an offering period exceeds the number of shares then available under the Plan (after deduction of all shares for which options have been exercised or are then outstanding), the Company shall make a pro rata allocation of the shares remaining available for option grant in as uniform a manner as shall be practicable and as it shall determine to be equitable. In such event, the Company shall give written notice of such reduction of the number of shares subject to the option to each employee affected thereby and shall similarly reduce the rate of payroll deductions, if necessary.
- 13. Administration. The Plan shall be administered by the Board of Directors of the Company or a committee appointed by the Board. The administration, interpretation or application of the Plan by the Board or its committee shall be final, conclusive and binding upon all participants. Members of the Committee who are eligible employees are permitted to participate in the Plan. Notwithstanding any provision to the contrary in the Plan, the Board or its committee may adopt rules or procedures relating to the operation and administration of the Plan to accommodate the specific requirements of local laws and procedures for jurisdictions outside of the United States. Without limiting the generality of the foregoing, the Board or its committee is specifically authorized to adopt rules and procedures regarding eligibility to participate, the definition of base pay, handling of payroll deductions, making of contributions to the Plan (including, without limitation, in forms other than payroll deductions), establishment of bank or trust accounts to hold payroll deductions, payment of interest, conversion of local currency, obligations to pay taxes, determination and change of offering periods, establishment of separate offerings, payment procedures, requirement that shares of the Company's Common Stock acquired through the Plan be held by a specific broker, withholding procedures and handling of stock certificates.
- 14. Non-U.S. Eligible Employees. Without amending the Plan, the Company may grant options or establish other procedures to provide benefits to non-U.S. employees of the Company and its subsidiaries (including with respect to non-U.S. employees, those entities which the Company directly or indirectly owns 50% or more of the equity interests unless designated by the Company as not participating in the Plan) under the Plan on such terms and conditions different from those specified in this Plan as may, in the judgment of the Company, be necessary or desirable to foster and promote achievement of the purposes of the Plan and shall have the authority to adopt such modifications, procedures, subplans and the like as may be necessary or desirable (a) to comply with provisions of applicable laws or regulations or conform to the requirements to operate the Plan in a qualified or tax or accounting advantageous manner, (b) to ensure the viability of the benefits under the Plan for eligible non-U.S. employees, or (c) to meet the objectives of the Plan. Notwithstanding anything to the contrary herein, any such actions taken by the Company with respect to eligible non-U.S. employees of any participating subsidiary may be treated as a subplan outside of an "employee stock purchase plan" under Section 423 of the Internal Revenue Code of 1986 and not subject to the requirements of Section 423 set forth in the Internal Revenue Code of 1986 and this Plan.
- 15. <u>Transferability</u>. Neither payroll deductions credited to a participant's account nor any rights with regard to the exercise of an option or to receive shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than

by will or the laws of descent and distribution) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with paragraph 10.

- 16. <u>Use of Funds</u>. All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions.
- 17. Reports. Individual accounts will be maintained for each participant in the Plan. Accounts under the Plan are purely book-keeping entries. Statements of account will be available to participating employees.
- 18. Changes in Capitalization and Transactions.
 - (a) If any change is made in the shares of the Company's Common Stock subject to the Plan, or subject to any option under the Plan, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan will be appropriately adjusted in the class(es) and maximum number of shares of the Company's Common Stock subject to the Plan pursuant to paragraph 12 and the option purchase limits, and the outstanding options will be appropriately adjusted in the class(es), number of shares of Common Stock and purchase limits of such outstanding options. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction that does not involve the receipt of consideration by the Company.)
 - (b) Without limitation on the preceding provisions, in the event of any corporate transaction, the Board may make such adjustment it deems appropriate to prevent dilution or enlargement of rights in the number and class of the Company's Common Stock which may be delivered under the Plan, in the number, class of or price of the Company's Common Stock available for purchase under the Plan and in the number of the Company's Common Stock which an employee is entitled to purchase and any other adjustments it deems appropriate. Without limiting the Board's authority under this Plan, in the event of any transaction, the Board may elect to have the options hereunder assumed or such options substituted by a successor entity, to terminate all outstanding options, either prior to their expiration or upon completion of the purchase of the Company's Common Stock on the next exercise date, to shorten the offering period by setting a new exercise date or to take such other action deemed appropriate by the Board.
- 19. <u>Amendment or Termination</u>. The Board of Directors of the Company may at any time terminate or amend the Plan. No such termination can affect options previously granted, nor may an amendment make any change in any option theretofore granted which adversely affects the rights of any participant, nor may an amendment be made without prior approval of the shareholders of the Company if such amendment would:
 - (a) Increase the number of shares that may be issued under the Plan;
 - (b) Change the designation of the employees (or class of employees) eligible for participation in the Plan; or
 - (c) Require shareholder approval under applicable law or exchange requirements.
- 20. <u>Notices</u>. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location or by the person, designated by the Company for the receipt thereof.
- 21. No Right of Employment. Neither the grant nor the exercise of any options under this Plan nor anything in this Plan shall impose upon the Company or any participating subsidiary any obligation to employ or continue to employ any employee. The right of the Company or a participating subsidiary to terminate any employee shall not be diminished or affected because any options have been granted to such employe

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)			
	TION 13 OR 15(d) OF TH	E SECURITIES EXCHANGE AC	T OF 1934
	For the Fiscal Year Ended (October 3, 2020	
	or		
☐ TRANSITION REPORT PURSUANT TO	SECTION 13 OR 15(d) OF Commission File Number		E ACT OF 1934
	COHERENT	C, INC.	
Delaware (State or other jurisdiction of incorporation or organization)		94-16225 - (I.R.S. Emp Identification	loyer
(Ad Registrant's	Patrick Henry Drive, Santa Conductor of principal executive telephone number, including the registered pursuant to Secondary of the secondary	offices) (Zip Code) g area code: (408) 764-4000	
Title of each class	Trading Symbo	Name of each ex	xchange on which registered
Common Stock, \$0.01 par value	COHR		Q Stock Market LLC Hobal Select Market
Securities	registered pursuant to Secti	on 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 Secu	urities Act. Yes ⊠ No □
Indicate by check mark if the registrant is no Act of 1934 (the "Exchange Act"). Yes ☐ No ⊠		rsuant to Section 13 or Section 15	(d) of the Securities Exchange
Indicate by check mark whether the registrar Exchange Act of 1934 during the preceding 12 mc (2) has been subject to such filing requirements for	onths (or for such shorter pe	eriod that the registrant was requir	15(d) of the Securities ed to file such reports) and
Indicate by check mark whether the registrar to Rule 405 of Regulation S-T ($\S229.405$ of this characteristic required to submit such files.) Yes \boxtimes No \square	nt has submitted electronica napter) during the preceding	lly every Interactive Data File requ g 12 months (or for such shorter pe	aired to be submitted pursuant criod that the registrant was
Indicate by check mark whether the registrar company or an emerging growth company. See det "emerging growth company" in Rule 12b-2 of the	finitions of "large accelerate		
Large accelerated filer ─ Accelerated filer ─	Non-accelerated filer	Smaller reporting company	Emerging growth company [
If an emerging growth company, indicate by complying with any new or revised financial account	check mark if the registran anting standards provided p	t has elected not to use the extended tursuant to Section 13(a) of the Ex	ed transition period for change Act.
Indicate by check mark whether the registrar its internal control over financial reporting under prepared or issued its audit report. \boxtimes	nt has filed a report on and Section 404(b) of the Sarba	attestation to its management's assanes-Oxley Act by the registered p	sessment of the effectiveness of ublic accounting firm that
Indicate by check mark whether the registrar	nt is a shell company (as def	ined in Rule 12b-2 of the Exchang	e Act). Yes □ No ⊠

As of November 25, 2020, 24,439,150 shares of common stock were outstanding. The aggregate market value of the voting shares (based on the closing price reported on the NASDAQ Global Select Market on April 4, 2020) of Coherent, Inc., held by nonaffiliates was approximately \$1,386,117,559. For purposes of this disclosure, shares of common stock held by persons who own 5% or more of the outstanding common stock and shares of common stock held by each officer and director have been excluded in that such persons may be deemed to be "affiliates" as that term is defined under the Rules and Regulations of the Exchange Act. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

DOCUMENT INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the registrant's 2021 Annual Meeting of Stockholders are incorporated by reference into Part III of the Form 10-K to the extent stated herein. The Proxy Statement or an amended report on Form 10-K will be filed within 120 days of the registrant's fiscal year ended October 3, 2020.

TABLE OF CONTENTS

SPECIAL NOT	TE REGARDING FORWARD LOOKING STATEMENTS	1
RISK FACTOR	RS SUMMARY	3
PART I		
ITEM 1.	BUSINESS	6
ITEM 1A.	RISK FACTORS	28
ITEM 1B.	UNRESOLVED STAFF COMMENTS	50
ITEM 2.	PROPERTIES	50
ITEM 3.	LEGAL PROCEEDINGS	51
ITEM 4.	MINE SAFETY DISCLOSURES	52
PART II		
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED	
	STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	53
ITEM 6.	SELECTED FINANCIAL DATA	54
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	55
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	75
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	77
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	134
ITEM 9A.	CONTROLS AND PROCEDURES	135
ITEM 9B.	OTHER INFORMATION	138
PART III		
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.	139
ITEM 11.	EXECUTIVE COMPENSATION	139
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	139
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE	139
ITEM 14.	PRINCIPAL ACCOUNTING FEES AND SERVICES	140
PART IV		
	EXHIBITS, FINANCIAL STATEMENT SCHEDULES	141
SIGNATURI		

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This annual report contains certain forward-looking statements. These forward-looking statements include, without limitation, statements relating to:

- expansion into, and financial returns from, new markets;
- maintenance and development of current and new customer relationships;
- enhancement of market position through existing or new technologies;
- timing of new product introductions and shipments;
- · optimization of product mix;
- future trends in microelectronics, scientific and government programs, OEM components and instrumentation and materials processing;
- utilization of vertical integration;
- adoption of our products or lasers generally;
- applications and processes that will use lasers, including the suitability of our products;
- · capitalization on market trends;
- alignment with current and new customer demands;
- positioning in the marketplace and gains of market share;
- design and development of products, services and solutions;
- control of supply chain and partners;
- protection of intellectual property rights;
- · compliance with environmental and safety regulations;
- net sales and operating results, including the timing and impact on fiscal 2021 revenues of recoveries in investments;
- any potential increase in future demand in the microelectronics flat panel display market;
- the timing of any buildout of OLED manufacturing capacity;
- effect of global economic conditions, including in particular resulting from U.S. and Chinese trade policies;
- · capital spending;
- order volumes;
- fluctuations in backlog, including potential for cancellation or rescheduling of orders;
- · variations in stock price;
- · growth in our operations;
- trends in our revenues, particularly as a result of seasonality;
- controlling our costs;
- sufficiency and management of cash, cash equivalents and investments;
- acquisition efforts, payment methods for acquisitions and utilization of technology from our acquisitions, and potential synergies and benefits, including completion of post-acquisition integration and restructuring processes, in particular with respect to our acquisition of Rofin Sinar Technologies, Inc. ("Rofin");
- · sales by geography;
- effect of legal claims;

- expectations regarding the payment of future dividends;
- effect of competition on our financial results;
- plans with respect to leases;
- · compliance with standards;
- effect of our internal controls;
- optimization of financial results;
- repatriation of funds;
- · accounting for goodwill and intangible assets, inventory valuation, warranty reserves and taxes; and
- impact from our use of financial instruments.

In addition, we include forward-looking statements under the "Our Strategy" and "Future Trends" headings set forth below in the section titled "Business".

You can identify these and other forward-looking statements by the use of the words such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "estimates," "intends," "potential," "projected," "continue," "our observation," or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below in the sections titled "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors." All forward-looking statements included in this document are based on information available to us on the date hereof. We undertake no obligation to update these forward-looking statements as a result of events or circumstances or to reflect the occurrence of unanticipated events or non-occurrence of anticipated events, except to the extent required by law.

RISK FACTORS SUMMARY

You should carefully consider the information set forth below in the section titled "Risk Factors" before deciding whether to invest in our securities. Below is a summary of the principal risks associated with an investment in our securities.

- Our business, financial condition and results of operations for fiscal year 2020 and beyond have been and may continue to be materially adversely affected by the novel coronavirus ("COVID-19") pandemic and the related private and public sector responses to the pandemic.
- Our operating results and stock price have varied in the past and will continue to be subject to fluctuations based upon numerous factors, including those discussed in the section titled "Risk Factors" and throughout this report.
- Our dependence on sole source or limited source suppliers for some of the key components and
 materials used in our products makes us susceptible to supply shortages or price fluctuations that
 could adversely affect our business, particularly our ability to meet our customers' delivery
 requirements.
- We participate in the microelectronics 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.
- We participate in the flat panel display market, which has a relatively limited number of end
 customer manufacturers. Our backlog, timing of net sales and results of operations could be negatively
 impacted in the event we face any significant periods with few or no orders or our customers
 reschedule or cancel orders.
- Some of our laser systems are complex in design and may contain defects that are not detected until deployed by our customers, which could increase our costs and reduce our net sales.
- Continued volatility in the advanced packaging and semiconductor manufacturing markets could adversely affect our business, financial condition and results of operations.
- Our future success depends on our ability to increase our sales volumes and decrease our costs to offset potential declines in the average selling prices of our products.
- We face risks associated with our worldwide operations and sales that could harm our financial condition and results of operations.
- We depend on skilled personnel to operate our business effectively, and if we are unable to retain existing or hire additional personnel when needed, or manage transitions among members of our leadership team, our ability to develop and sell our products could be harmed.
- The long sales cycles for many of our products may cause us to incur significant expenses without offsetting net sales.
- The markets in which we sell our products are intensely competitive and increased competition could cause reduced sales levels, reduced gross margins or the loss of market share.
- If we fail to accurately forecast component and material requirements for our products, we could
 incur additional costs and incur significant delays in shipments, which could result in a loss of
 customers.
- Our reliance on contract manufacturing and outsourcing may adversely impact our financial results
 and operations due to our decreased control over the performance and timing of certain aspects of our
 manufacturing.
- If we fail to effectively manage our growth or, alternatively, our spending during downturns, our business could be disrupted, which could harm our operating results.
- Our market is 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 future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers.
- Our and our customers' operations would be seriously harmed if our logistics or facilities or those of our suppliers, our customers' suppliers or our contract manufacturers were to experience catastrophic loss.
- We may not be able to integrate the business of Rofin or other future acquisitions successfully with our own, realize the anticipated benefits of such acquisitions or manage our expanded operations, any of which would adversely affect our results of operations.
- We may not find suitable acquisition candidates in the future and we may not be able to successfully integrate and manage acquired businesses. Any acquisitions we make could disrupt our business and harm our financial condition.
- Charges to earnings resulting from the application of the purchase method of accounting to the Rofin acquisition may adversely affect our results of operations.
- Our increased level of indebtedness following the Rofin merger could adversely affect us, including by decreasing our business flexibility, and will increase our borrowing costs.
- If our goodwill or intangible assets become impaired, we may be required to record a significant charge to earnings.
- Our cash and cash equivalents and short-term investments are managed through various banks
 around the world and volatility in the capital and credit market conditions could cause financial
 institutions to fail or materially harm service levels provided by such banks, both of which could have
 an adverse impact on our ability to timely access funds.
- We are exposed to credit risk and fluctuations in the market values of our investment portfolio.
- If we are unable to protect our proprietary technology, our competitive advantage could be harmed.
- Intellectual property related claims or litigation could be costly and divert the attention of our technical and management personnel. Adverse resolution of litigation may harm our operating results or financial condition.
- Our information systems are subject to attacks, interruptions and failures.
- Difficulties with our enterprise resource planning system and other parts of our global information technology system could harm our business and results of operation. If our network security measures are breached and unauthorized access is obtained to a customer's data or our data or our information technology systems, we may incur significant legal and financial exposure and liabilities.
- Changes in tax rates, tax liabilities or tax accounting rules could affect future results.
- Governmental regulations, including tariffs and duties, affecting the import or export of products could negatively affect our business, financial condition and results of operations.
- We use standard laboratory and manufacturing materials that could be considered hazardous and we
 could be liable for any damage or liability resulting from accidental environmental contamination
 or injury.
- Compliance or the failure to comply with current and future environmental regulations could cause us significant expense.
- Failure to maintain effective internal controls may cause a loss of investor confidence in the reliability of our financial statements or cause us to delay filing our periodic reports with the SEC and adversely affect our stock price.
- We face particular privacy, data security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data.
- Violations of anti-bribery, anti-corruption, and/or international trade laws to which we are subject could negatively affect our business, financial condition and results of operations. Allegations thereof

may entail significant distraction of management and allocation of resources in the investigation and remediation thereof, which could also negatively affect our business, financial condition and results of operations.

• Provisions of our charter documents and Delaware law, and our Change of Control and Leadership Change Severance Plan, may have anti-takeover effects that could prevent or delay a change in control.

PART I

ITEM 1. BUSINESS

GENERAL

Business Overview

We are one of the world's leading providers of laser solutions and optics for microelectronics, life sciences, industrial manufacturing, and scientific markets. More than a provider of lasers, we deliver systems to the world's leading brands, innovators, and researchers, all backed with a global service and support network. Since inception in 1966, we have grown through internal expansion and through strategic acquisitions of complementary businesses, technologies, intellectual property, manufacturing processes, and product offerings.

We are organized into two reporting segments: OEM Laser Sources ("OLS") and Industrial Lasers & Systems ("ILS"), based on the organizational structure of the company and how the chief operating decision maker ("CODM") receives and utilizes information provided to allocate resources and make decisions. This segmentation reflects the go-to-market strategies and synergies for our broad portfolio of laser technologies and products. While both segments deliver cost-effective, highly reliable photonics solutions, the OLS business segment is focused on high performance laser sources and complex optical sub-systems typically used in microelectronics manufacturing, medical diagnostics, and therapeutic applications, as well as in scientific research. Our ILS business segment delivers high performance laser sources, sub-systems, and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tools, consumer goods, and medical device manufacturing.

Income from continuing operations is the measure of profit and loss that our CODM uses to assess performance and make decisions. Income from continuing operations represents the sales less the cost of sales and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared sales and manufacturing costs. We do not allocate certain operating expenses to our operating segments and we manage them at the corporate level. These unallocated costs include stock-based compensation and corporate functions (certain advanced research and development, management, finance, legal, and human resources) and are included in Corporate and other. Management does not consider unallocated Corporate and other costs in its measurement of segment performance.

We were originally incorporated in California on May 26, 1966 and reincorporated in Delaware on October 1, 1990. Our common stock is listed on the NASDAQ Global Select Market and we are a member of the Standard & Poor's MidCap 400 Index and the Russell 1000 Index.

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2020, 2019, and 2018 ended on October 3, September 28, and September 29, respectively, and are referred to in this annual report as fiscal 2020, fiscal 2019, and fiscal 2018 for convenience. Fiscal 2020 included 53 weeks and fiscal 2019 and 2018 included 52 weeks.

Additional information about Coherent, Inc. (referred to herein as the Company, we, our, or Coherent) is available on our web site at www.coherent.com. We make available, free of charge on our web site, access to our annual report on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after we file or furnish them electronically with the Securities and Exchange Commission ("SEC"). Information contained on our web site is not part of this annual report or our other filings with the SEC. Any product, product name, process, or technology described in these materials is the property of Coherent.

RECENT EVENTS

Coronavirus pandemic (COVID-19)

In December 2019, COVID-19 was reported, and in January 2020, the World Health Organization ("WHO") declared it a Public Health Emergency of International Concern. On February 28, 2020, the

WHO raised its assessment of the COVID-19 threat from high to very high at a global level due to the continued increase in the number of cases and affected countries, and on March 11, 2020, the WHO characterized COVID-19 as a pandemic. In an effort to contain COVID-19 or slow its spread, governments around the world have enacted various measures, including orders to close all businesses not deemed "essential," isolate residents in their homes or places of residence, and practice social distancing at and away from work. These actions and the global health crisis caused by COVID-19 will continue to negatively impact global business activity, which will continue to negatively affect our revenue and results of operations. Each of the regions where we generate a majority of our revenue including Asia, Europe, and North America have been and will continue to be impacted by COVID-19. The timing and extent of impact related to COVID-19 varies by country and region.

In determining the impact of the COVID-19 pandemic in relation to our net sales, we compare our actual results to our most recently published forecast and the net sales guidance range communicated in our quarterly earnings call. This forecast has been adjusted for known impacts to our bookings and net sales from COVID-19 and other factors. Using this criteria, we estimate that our sales for the following fiscal quarters were further negatively impacted by the COVID-19 pandemic: (i) for the fiscal quarter ended April 4, 2020 — \$31.0 million, (ii) for the fiscal quarter ended July 4, 2020 — \$9.0 million, and (iii) for the fiscal quarter ended October 3, 2020 — an immaterial amount. The effect of COVID-19 as forecasted and as further experienced was most significant in Asia during the quarter ended April 4, 2020 and began impacting Europe and North America only later in the quarter ended April 4, 2020 as the virus spread globally. In the quarter ended July 4, 2020, the global economic effect of the COVID-19 pandemic was less significant, though continued to be high in certain regions. While we believe that COVID-19 was a partial cause of the decline in revenue in the second quarter of fiscal 2020, we also had lower shipments related to ELA tools in the flat panel display market and lower shipments in materials processing applications in the second quarter of fiscal 2020 that were mostly unrelated to COVID-19.

During fiscal 2020, the global demand environment was uncertain at times given the effects of COVID-19 on many businesses, including manufacturing facilities and customer confidence around the world. While we saw a partial recovery in order volumes in China in the latter half of March and the third quarter of fiscal 2020, this coincided with declining bookings in other regions, particularly in North America, and to a lesser extent in Europe and other countries in Asia. In the fourth quarter of fiscal 2020, we saw global demand recover in all regions and begin to return to a more normalized demand trend. However, we cannot predict future resurgences of COVID-19 and the impact that it may have on future demand for our products and services, particularly given the recently announced shutdown measures taken in certain countries in Europe.

Currently, our major production facilities in Europe, Southeast Asia, and the United States remain open. At all of our locations, we have transitioned from business continuity plans to return-to-operations plans while continuing to maintain high standards of employee safety and sanitization protocols. Our Return to Operations Plans have a phased approach with the primary focus on employee safety, with a continuing requirement for "working from home" for other members of our workforce wherever possible. We have vertically integrated manufacturing, and many of the components produced at certain of our facilities supply other company facilities, are single sourced internally and are not available from third-party suppliers (for example our semiconductor diodes are manufactured in Santa Clara, California). While we do maintain a safety stock of critical components at our various locations, the scope, timing, and duration of various government restrictions to address the COVID-19 pandemic could impact our internal supply chain. We have implemented certain policy changes to help support our employees impacted by COVID-19. These measures have and will continue to increase the cost of our operations but the magnitude and length of time of this impact is difficult to quantify at this time and may continue to be difficult to estimate in the future. If our sales are reduced for an extended period or if our production output falls because of government restrictions, we may be required to reduce payroll-related costs and other expenses in the future through layoffs or furloughs, even though we have not done so to date.

We have not experienced significant supply disruption from third-party component suppliers. However, we continue to face some supply chain constraints primarily related to logistics, including available air cargo space and higher freight rates. Available cargo space on flights between the U.S. and Europe, and Europe and Asia has been and remains limited as a result of the impact from COVID-19 and government and

business responses to it, and this has increased shipping time and costs. In addition, shipments between countries have been more severely impacted by COVID-19 and we are experiencing delays due to additional checks at border crossings, including within Europe and Asia. There has also been sporadic restrictions on individual travel between certain states in the United States of America as well. Government actions related to COVID-19 come on the heels of increasing trade tensions between the United States and China, which may continue. We believe we have the ability to meet the near-term demand for our products, but the situation is fluid and subject to change.

We continue to monitor the rapidly evolving conditions and circumstances as well as guidance from international and domestic authorities, including public health authorities, and we may need to take additional actions based on their recommendations. There is considerable uncertainty regarding the impact on our business stemming from current measures and potential future measures that could restrict access to our facilities, limit our manufacturing and support operations, and place restrictions on our workforce, customers, and suppliers. The measures implemented by various authorities related to the COVID-19 outbreak have caused us to change our business practices including those related to where employees work, the distance between employees in our facilities, limitations on in-person meetings between employees and with customers, suppliers, service providers, and stakeholders as well as restrictions on some shipping activities, business travel to domestic and international locations or to attend trade shows, investor conferences and other events. In March of 2020, we formed a COVID Steering Committee to, among other things, propose, discuss, and implement best practices in response to COVID-19. The COVID Steering Committee meets weekly and more often if required. All of our executive officers are members of the COVID Steering Committee as are many key senior-level employees.

The COVID-19 pandemic has significantly increased worldwide and regional economic uncertainty and decreased demand for our products in many markets we serve, which could continue for an unknown period of time. In these circumstances, there may be developments outside of our control, including the length and extent of the COVID-19 outbreak, government-imposed measures and our ability to ship as well as install products and/or service installed products that may require us to adjust our operating plans. As such, given the dynamic nature of this situation, we cannot estimate with certainty the future impacts of COVID-19 on our financial condition, results of operations or cash flows. However, we do expect that it could have an adverse impact on our revenue as well as our overall profitability and may lead to an increase in inventory provisions, allowances for credit losses, and a volatile effective tax rate driven by changes in the mix of earnings across our markets.

See the additional Risk Factor included in Part I-Item 1A of this annual report regarding the impact of COVID-19.

Goodwill and other impairment charges

Based on our internal projections and the preparation of our financial statements for the quarter ended April 4, 2020, and considering the forecasted decrease in demand due to the COVID-19 pandemic and other factors, we believed that the fair value of our ILS reporting unit might no longer have exceeded its carrying value and performed an interim goodwill impairment test on the ILS and OLS reporting units. Based on the estimated fair value of the ILS reporting unit, in the quarter ended April 4, 2020, we recorded non-cash pretax goodwill impairment charges of \$327.2 million. In addition, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment, and ROU assets as of April 4, 2020 and recorded non-cash pre-tax charges, in the quarter ended April 4, 2020, related to the impairment intangible assets, property, plant and equipment and ROU assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively. See Note 8, "Goodwill and Intangible Assets" and Note 11, "Leases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

Restructuring

In June 2019, we internally announced our plans to exit a portion of our High Power Fiber Laser ("HPFL") business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain HPFL activities from our Hamburg, Germany facility. In conjunction with this announcement, we recorded restructuring charges in fiscal 2019 of \$19.7 million. The charges

primarily related to write-offs of excess inventory, which is recorded in cost of sales, and estimated severance. We recorded charges of \$1.1 million in fiscal 2020, primarily related to accelerated depreciation and project management consulting.

We also vacated our leased facility in Santa Clara at the end of the lease term on July 31, 2020 and combined operations into our owned Santa Clara headquarters. We did not incur material expenses in fiscal 2019 related to this project. In fiscal 2020, we incurred costs of \$1.5 million, primarily related to accelerated depreciation.

In the fourth quarter of fiscal 2020, we began a restructuring program in our ILS segment which includes management reorganizations, the planned closure of certain manufacturing sites, and the right-sizing of global sales, service, order admin, marketing communication, and certain administrative functions, among others. In the fourth quarter of fiscal 2020, we incurred costs of \$2.6 million, primarily related to severance.

See Note 19, "Restructuring Charges" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

Other

In April 2020, we appointed a new President and Chief Executive Officer ("CEO"), at which time our former President and CEO, who had served in such position since 2002, transitioned to the role of special advisor to the Company. On August 20, 2020, we announced that our Executive Vice President and Chief Financial Officer will retire from the Company no later than February 28, 2021.

On February 5, 2020, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock through January 31, 2021. We made no repurchases under the program during fiscal 2020.

INDUSTRY BACKGROUND

The word "laser" is an acronym for "light amplification by stimulated emission of radiation." A laser emits an intense coherent beam of light with some unique and highly useful properties. Most importantly, a laser is orders of magnitude brighter than any lamp. As a result of its coherence, the beam can be focused to a very small and intense spot, useful for applications requiring very high power densities including welding and other materials processing procedures. The laser's high spatial resolution is also useful for microscopic imaging and inspection applications. Laser light can be monochromatic — all of the beam energy is confined to a narrow wavelength band.

There are many types of lasers and one way of classifying them is by the material or medium used to create the lasing action. This can be in the form of a gas, liquid, semiconductor, solid state crystal or fiber. Lasers can also be classified by their output wavelength: ultraviolet, visible, infrared or wavelength tunable. We manufacture all of these laser types. There are also many options in terms of pulsed output versus continuous wave, pulse duration, output power, beam dimensions, etc. In fact, each application has its own specific requirements in terms of laser performance. The broad technical depth at Coherent enables us to offer a diverse set of product lines characterized by lasers targeted at growth opportunities and key applications. In all cases, we aim to be the supplier of choice by offering a high-value combination of superior technical performance and high reliability.

Photonics has taken its place alongside electronics as a critical enabling technology for the twenty-first century. Photonics-based solutions are entrenched in a broad array of industries that include microelectronics, flat panel displays, machine tools, automotive, and medical diagnostics, with adoption continuing in ever more diverse applications. Growth in these applications stems from two sources. First, there are many applications where the laser is displacing conventional mechanical devices because it can do the job faster, better or more economically. Second, there are new applications where the laser is the enabling tool that makes the work possible, as in the conversion of amorphous silicon into poly crystalline silicon at low temperatures, where lasers are used in the manufacturing of high resolution rigid and flexible OLED displays found in the latest smartphones, tablets and laptop computers.

Key laser applications include: semiconductor inspection; manufacturing of advanced printed circuit boards ("PCBs"); flat panel display manufacturing; solar cell production; medical and bio-instrumentation; materials processing; metal cutting and welding; industrial process and quality control; marking; imaging and printing; graphic arts and display; and research and development. For example, ultraviolet ("UV") lasers are enabling the continuous move towards miniaturization, which drives innovation and growth in many markets. In addition, the advent of industrial grade ultrafast lasers continues to open up new applications for laser processing.

Coherent occupies a unique position in the industry thanks to the breadth and depth of our product and technology portfolio, which includes laser sources, critical or enabling photonics components and laser systems. Working closely with our customers we have developed specialized solutions that include lasers, delivery and process optics in complete assemblies (sub-systems), and for certain applications and markets we have also developed parts handling and automation to build complete laser systems.

OUR STRATEGY

We strive to develop innovative and proprietary products and solutions that meet the needs of our customers and that are based on our core expertise in lasers and optical technologies. In pursuit of our strategy, we intend to:

- Effect our Good to Great Transformation We were founded in 1966 and have developed critical technology and have built this company into a multinational corporation and leader in the photonics industry. We are engaged in a multi-pronged and multi-year transformation focusing on all aspects of our company. Namely, we are working to:
 - Transform the operational efficiency of all our processes
 - Reduce the complexity of our portfolio
 - Focus our investments on growth opportunities
 - · Enhance the focus and alignment with our customers even further
- Streamline our manufacturing structure and improve our cost structure We will focus on optimizing the mix of products that we manufacture internally and externally. We will utilize vertical integration where our internal manufacturing process is considered proprietary and seek to leverage external sources when the capabilities and cost structure are well developed and on a path towards commoditization.
- Focus on long-term improvement of adjusted EBITDA, in dollars and as a percentage of net sales, drive free cash flow and gross margin as a percentage of sales We define adjusted EBITDA as operating income adjusted for depreciation, amortization, stock-based compensation expense, restructuring costs, and certain other non-operating income and expense items, such as costs related to our acquisitions. Key initiatives to reach our goals for EBITDA and gross margin improvements include utilization of our Asian manufacturing locations, optimizing our supply chain and continued leveraging of our infrastructure. Our focus on free cash flow is to generate cash over the long term as it is essential to maintaining a healthy business and providing funds to help fuel growth.
- Leverage our technology portfolio and application engineering to lead the proliferation of photonics into broader markets We will continue to identify opportunities in which our technology portfolio and application engineering can be used to offer innovative solutions and gain access to new markets.
- Optimize our leadership position in existing markets There are a number of markets where we have historically been at the forefront of technological development and product deployment and from which we have derived a substantial portion of our revenues. We plan to optimize our financial returns from these markets.
- Maintain and develop additional strong collaborative customer and industry relationships We believe that the Coherent brand name and reputation for product quality, technical performance, and customer satisfaction will help us to further develop our loyal customer base. We plan to maintain our current customer relationships and develop new ones with customers who are industry leaders and

work together with these customers to design and develop innovative product systems and solutions as they develop new technologies.

- Develop and acquire new technologies and market share We will continue to enhance our market position through our existing technologies and develop new technologies through our internal research and development efforts, as well as through the acquisition of additional complementary technologies, intellectual property, manufacturing processes, and product offerings.
- Focus on our core end markets While we are organized around our two segments of OLS and ILS, we also take a holistic approach to aligning and driving our business to focus on our four core end markets, which have been realigned as follows beginning in fiscal 2021:
 - Microelectronics (which captures the 3 sub-markets of Display, Semiconductor, and Advanced Packaging & Interconnect);
 - Instrumentation (which captures the 3 sub-markets of Bio-Instrumentation, Therapeutics & Research);
 - · Precision Manufacturing; and
 - Aerospace & Defense

APPLICATIONS

We have historically grouped our products into end markets which address a broad range of applications: Microelectronics, Materials Processing, OEM Components and Instrumentation, and Scientific and Government Programs. As noted above, we have realigned this grouping beginning with our fiscal year 2021.

The following table sets forth, for the periods indicated, the percentages of total net sales by market application:

	Fiscal 2020	Fiscal 2019 Percentage of total net sales	Fiscal 2018 Percentage of total net sales
	Percentage of total net sales		
Consolidated:			
Microelectronics	43.8%	44.2%	54.5%
Materials processing	27.3%	28.3%	27.4%
OEM components and instrumentation	20.2%	18.6%	11.6%
Scientific and government programs	8.7%	8.9%	6.5%
Total	100.0%	100.0%	100.0%

Microelectronics

Nowhere is the trend towards miniaturization and higher performance more prevalent than in the Microelectronics market where smartphones, tablets, personal computers, televisions, and wearables are driving advances in displays, integrated circuits, and PCBs. In response to market demands and consumer expectations, semiconductor and device manufacturers are continually seeking to improve their process and design technologies in order to manufacture smaller, more powerful, and more reliable devices at lower cost. New laser applications and new laser technologies are a key element in delivering higher resolution and higher precision at lower manufacturing cost.

We primarily support three sub-markets in the microelectronics industry: (1) flat panel display manufacturing, (2) semiconductor front-end manufacturing, and (3) advanced packaging and interconnects.

Microelectronics — flat panel display manufacturing

The high-volume consumer market is driving the production of flat panel displays in applications such as mobile phones, tablets, laptop computers, televisions and wearables. There are multiple types of established

displays, liquid crystal display ("LCD") and organic light emitting diodes ("OLED"), as well as emerging displays (MicroLED) based on different technologies. Each of these technologies utilize laser applications in their manufacturing process to enable improved yields, higher process speed, improved battery life, lower cost and/or superior display brightness, resolution and refresh rates.

Several display types require a high-density pattern of silicon thin film transistors. If this silicon is polycrystalline as opposed to amorphous, the display performance is greatly enhanced. Excimer-based processes, such as excimer laser annealing ("ELA") have allowed high-volume production of low-temperature polysilicon ("LTPS") on conventional glass substrates as well as flexible displays based on plastic substrates. Our excimer lasers provide a unique solution for LTPS because they are the only industrial-grade excimer lasers optimized for this application. The current state-of-the-art product for this application is our Vyper excimer laser and Linebeam systems. These systems deliver power ranges of 1200W to 3600W, depending on the system, enabling a critical manufacturing process step on substrate sizes up to Generation 6. These systems are integral to the manufacturing process on all leading LTPS-based smartphone displays and hold the potential for deployment in a variety of screens, including tablet, laptop, automotive displays, and OLED television. Excimer-based LTPS is also enabling flexible OLED displays which have undergone rapid growth as they have been adopted into smartphones.

An emerging technology related to flat panel displays is MicroLED technology. The appeal of MicroLED is reduced electrical consumption for improved battery life and higher absolute brightness relative to OLED. We are continuing to accelerate our efforts and investments in UV MicroLED solutions to help our customers develop the laser processes of record, so we can, in turn, develop the laser-based capital equipment systems needed for mass production.

We see a co-existence of the two technologies in the years to come, with flexible OLED remaining the dominant choice for mobile applications in the long term, and MicroLED becoming the preferred technology in large diagonal high end television, and devices such as watches or future smart glasses where brightness is a key advantage and battery size is at a premium. We believe we are well positioned to remain the laser solutions display industry leader for all display technologies.

A modern flat panel display incorporates a number of different layers, some of which are thin films that need to be cut or structured. As film thicknesses decrease over time, lasers are becoming the tool of choice to process these materials. Our DIAMOND CO₂ and Rapid series ultrafast lasers are used for cutting flat panel display films.

We have developed a proprietary technology for cutting brittle materials such as glass and sapphire without debris and with zero kerf called SMART CleaveTM, which is used for cutting brittle materials used in displays. This technology uses ultrafast lasers coupled with proprietary optics.

Our AVIA, Rapid, Monaco, and DIAMOND CO₂ and CO lasers are also used in other production processes for flat panel displays. These processes include drilling, cutting, patterning, marking, and yield improvement.

While the timing and adoption rate of an emerging display technology such as 'micro' LED (μ LED) is still hard to gauge, it is likely to make use of both similar technologies such as a LTPS backplane, as well as new ones, e.g. new versions of laser lift-off (LLO) and laser induced forward transfer (LIFT). We expect that this will represent an expanding market opportunity into new display form factors for laser-based processes.

Microelectronics — semiconductor front-end manufacturing

The term "front-end" refers to the production of semiconductor devices which occurs prior to packaging.

As semiconductor device geometries decrease in size, devices become increasingly susceptible to smaller defects during each phase of the manufacturing process and these defects can negatively impact yield. One of the semiconductor industry's responses to the increasing vulnerability of semiconductor devices to smaller defects has been to use defect detection and inspection techniques that are closely linked to the manufacturing process.

Detecting the presence of defects is only the first step in preventing their recurrence. After detection, defects must be examined in order to identify their size, shape and the process step in which the defect occurred. This examination is called defect classification. Identification of the sources of defects in the lengthy and complex semiconductor manufacturing process has become essential for maintaining high yield production. Semiconductor manufacturing has become an around-the-clock operation and it is important for products used for inspection, measurement and testing to be reliable and to have long lifetimes. Our Azure, Paladin, Excimer, Ion, and OPSL lasers are used to detect and characterize defects in semiconductor chips.

Microelectronics — advanced packaging and interconnects

After a wafer is patterned, there are then a host of other processes, referred to as back-end processing, which finally result in a packaged encapsulated silicon chip. Ultimately, these chips are then assembled into finished products. The advent of high-speed logic and high-memory content devices has caused chip manufacturers to look for alternative technologies to improve performance and lower process costs. This search includes new types of materials, such as low-k and thinner silicon. Our AVIA, Rapid, Monaco, and Matrix lasers provide economical methods of cutting and scribing these wafers while delivering higher yields than traditional mechanical methods.

There are similar trends in chip packaging and PCB manufacturing requiring more compact packaging and denser interconnects. In many cases, lasers present enabling technologies. For instance, lasers are now the only economically practical method for drilling blind microvias in chip substrates and in both rigid and flexible PCBs. These microvias are tiny interconnects that are essential for enabling high-density circuitry commonly used in smartphones, tablets, and advanced computing systems. Our DIAMOND CO₂ and AVIA diode pumped solid state ("DPSS") lasers are the leading lasers in this application. The ability of these lasers to operate at very high repetition rates translates into faster drilling speeds and increased throughput in microvia processing applications. In addition, multi-layer circuit boards require more flexible production methods than conventional printing technologies can offer, which has led to widespread adoption of laser direct imaging ("LDI"). Our Paladin laser is used for this application.

We also offer market-leading solutions for laser marking of wafers and ICs, such as our PowerLine laser sub-systems.

Materials Processing

Beginning in fiscal 2021, we will increase our focus on Precision Manufacturing, a subset of the Materials Processing market, where we participate well both in terms of market share and margins on all three levels of components, lasers, and systems. We will be focusing our R&D and our manufacturing capabilities towards new products that will serve higher margin, defendable markets. Examples include medical device manufacturing, semiconductor wafer marking, and precision welding. In the components space, we plan to introduce a whole new category of laser diode products that will allow us to address new applications and customers, dramatically increasing the size of our servable market.

In fiscal 2020, we primarily supported four sub-markets in the materials processing industry: (1) automotive, (2) machine tools, (3) medical device, and (4) consumer goods, as well a number of smaller sub-markets. Our sales to this highly diverse sub-market include components, laser sources, laser diagnostic equipment, and complete laser systems. At a high level, the drivers for laser deployment within the materials processing sub-market are faster processing with higher yields, processing of new and novel materials, more environmentally friendly processes, all with higher precision. With the broadest product portfolio in the laser industry, we offer solutions for almost any application on any material to our customers. The most common applications include cutting, welding, joining, drilling, perforating, scribing, engraving, and marking.

Lasers are used in a number of applications in the automotive sub-market, from fine processing of high precision parts to marking, as well as cutting of metals and welding large components such as gear boxes and car bodies for customers including OEMs and their customers. With the increasing production of electric vehicles, lasers are playing a key role in the manufacture and welding of batteries. We serve this submarket with a number of our products including ultrafast, DPSS, CO₂, diode and fiber lasers as well as systems in the areas of marking, scribing, cutting and welding.

We serve the machine tools sub-market with components, laser sources, and systems in applications including cutting, welding, marking, and additive manufacturing. We offer fiber lasers with different performance points in terms of power levels and beam profiles to address specific applications. During the past 12 months we have chosen to focus on specific lasers and processes including single mode lasers and advanced beam shaping options, e.g. the ARM advanced high power fiber laser where the beam parameters can be optimized to deliver higher quality welds with a wide variety of metals which translate into higher customer yields and enables more cost efficient designs. As a fully vertically integrated fiber and laser diode supplier, we are able to produce all key components in-house. Other products include our full line up of CO2 lasers, DPSS, and ultrafast lasers.

The medical device sub-market is characterized by its need for high precision manufacturing with high levels of quality control which lends itself very well to laser manufacturing. Applications include fine cutting and welding in addition to high quality and specialized marking. We serve this sub-market with a number of lasers as well as a portfolio of systems.

In the consumer goods sub-market, we serve a large variety of applications in various industries, such as packaging, digital printing, jewelry, textiles, security, and consumer electronics. We serve these industries with a broad offering of our products from lasers to laser tools. As a consequence, this market represents a stable and growing opportunity for us.

In summary, we serve the materials processing market with a very broad product portfolio. Laser sources include the Diamond series mid-power CO and CO₂ lasers; the DC series of high power CO₂ lasers; Highlight FL high power fiber lasers; the DF series of high power diode laser systems; the Diamond mid-power and Q-Switched fiber; the COMPACT, MINI and EVOLUTION series of low and mid power diode lasers; the AViA, Matrix, Flare, and Helios DPSS lasers; and the Monaco and Rapid series of ultrafast lasers. Laser tools include the Performance, Select and Integral series of manual welding systems; the Exact, UW and MPS series of modular and highly configurable laser processing systems; the EasyMark, EasyJewel, LabelMarker Advanced and Combiline laser marking systems; and the META laser cutting tools. Laser sub-systems, i.e. laser sources combined with software, beam delivery, processing heads, process monitoring, pattern recognition and vision, include the PowerLine series for marking; the StarFiber for welding and cutting; the PWS welding system; the QFS laser scribing system; and the StarShape CO₂ laser-based systems.

OEM Components and Instrumentation

Instrumentation is one of our more mature commercial applications. Representative applications within this market include bio-instrumentation, medical OEMs, graphic arts and display, machine vision and aerospace and defense applications. We also support the laser-based instrumentation market with a range of laser-related components, including diode lasers and optical fibers. Our OEM component business includes sales to other, less integrated laser manufacturers participating in OEM markets such as materials processing, scientific, and medical.

Bio-instrumentation

Laser applications for bio-instrumentation include confocal microscopy for biological imaging that allows researchers and clinicians to visualize cellular and subcellular structures and processes with an incredible amount of detail; DNA sequencing where lasers provide automation and data acquisition rates that would be impossible by any other method; drug discovery — genomic and proteomic analyses that enable drug discovery to proceed at very high throughput rates; flow cytometry for analyzing and sorting single cells or populations of cells in a heterogeneous mixture, including blood samples; and Raman spectroscopy which enables chemical analysis in a wide range of commercial applications. Our OBIS, Flare, Galaxy, Sapphire, BioRay, Genesis and CellX lasers are used in several bio-instrumentation applications.

Medical therapy

We sell a variety of components and lasers to medical laser companies for use in end-user applications such as ophthalmology, aesthetic, surgical, therapeutic and dentistry. Our DIAMOND series CO₂ lasers are widely used in dental, aesthetic and surgical markets. We have a leading position in Lasik and photorefractive

keratectomy surgery methods with our ExciStar XS excimer laser platform. We also provide ultrafast lasers for use in cataract surgery and optical fibers for surgical applications.

The unique ability of our optically pumped semiconductor lasers ("OPSL") technology to match a wavelength to an application has led to the development of a high-power yellow (577nm) laser for the treatment of eye related diseases, such as Age Related Macular Degeneration and retinal diseases associated with diabetes. Other applications where our OBIS, Genesis and Sapphire series of lasers are used include the retinal scanning market in diagnostic imaging systems as well as new ground breaking in-vivo imaging.

Aerospace and defense

In fiscal 2021, we will disclose aerospace and defense as a separate market application, which was included in our OEM Components and Instrumentation market application in fiscal 2020. We serve the aerospace and defense markets with components and laser sources in a number of applications such as Directed Energy weapons, as well as technology for target designation, countermeasures, fiber optic gyroscopes, specialty large diameter optics and entire telescope payloads for intelligence, surveillance & reconnaissance. In particular, directed energy has seen rapid growth in the last couple of years, driven largely by the promise of being able to deter and repel asymmetrical threats such as drones in an effective and economical manner. We supply laser sources for directed energy applications as well as components, and recently we have seen growth in demand for optics used in space and ground-based telescopes.

Scientific and Government Programs

We are widely recognized as a technology innovator and the scientific market has historically provided an ideal "test market" for our leading-edge innovations. These have included ultrafast lasers, DPSS lasers, continuous-wave ("CW") systems, excimer gas lasers and water-cooled ion gas lasers. Our portfolio of lasers that address the scientific research market is broad and includes our Acuity, Chameleon, Chameleon Discovery, COMPexPro, Astrella, Revolution, Fidelity, Legend, Libra, Monaco, Vitara, Mephisto, Mira, Genesis and Verdi lasers. Many of the innovations and products pioneered in the scientific marketplace have become commercial successes for both our OEM customers and us.

We have a large installed base of scientific lasers which are used in a wide range of applications spanning virtually every branch of science and engineering. These applications include biology and life science, engineering, physical chemistry and physics. Most of these applications require the use of ultrafast lasers that enable the generation of pulses short enough to be measured in femto- or attoseconds (10^{-15} to 10^{-18} seconds). Because of these very short pulse durations, ultrafast lasers enable the study of fundamental physical and chemical processes with temporal resolution unachievable with any other tool. These lasers also deliver very high peak power and large bandwidths, which can be used to generate many exotic effects. Some of these are now finding their way into mainstream applications, such as microscopy or materials processing. The use of ultrafast lasers such as the Chameleon, Fidelity and Monaco in microscopy is now a common occurrence in bio-imaging labs, and they have become a crucial tool in modern neuroscience research.

FUTURE TRENDS

Beginning in fiscal 2021, we are aligning and driving our business to focus on four core end markets, which have been realigned as follows: Microelectronics (which captures the 3 sub-markets of Display, Semiconductor and Advanced Packaging & Interconnect); Instrumentation (which captures the 3 sub-markets of Bio-Instrumentation, Therapeutics & Research); Precision Manufacturing; and Aerospace & Defense.

Microelectronics

Lasers are widely used in mass production microelectronics applications largely because they enable entirely new application capabilities that cannot be realized by any other known means. These laser-based fabrication and testing methods provide a level of precision, typically on a micrometer and nanometer level, that are unique, faster, are touch free, deliver superior end products, increase yields, and/or reduce production costs. We anticipate this trend to continue, driven primarily by the increasing sophistication and

miniaturization of consumer electronic goods, resulting in increasing demand for better displays, more bandwidth and memory, and all packaged into devices which are lighter, thinner and consume less power. We believe that we are well positioned to continue to capitalize on the current market trends.

Excimer-based LTPS is a key technology for producing high resolution rigid and flexible OLED displays as well as future display technologies like μ LEDs.

Another key technology related to flat panel displays is that of the emerging MicroLED technology. The appeal of MicroLED is reduced electrical consumption for improved battery life and higher absolute brightness relative to OLED. We are continuing to accelerate our efforts and investments in UV MicroLED solutions to help our customers develop the laser processes of record, so we can, in turn, develop the laser-based capital equipment systems needed for mass production.

Demand for CO₂, Avia, Matrix, Rapid, Monaco, Helios and direct diode lasers correlate with the need for related flat panel display touch panel, film cutting, light guide technology, repair and frit welding applications.

The trend for thinner and lighter devices is impacting the glass substrates used in today's mobile devices requiring thinner glass with higher degrees of mechanical strength and scratch resistance. Mechanical means of cutting these glass and sapphire pieces are no longer adequate to meet future requirements and we expect lasers to play an increased role. Our CO, CO₂, Monaco and Rapid lasers together with our proprietary SmartCleave technology are well positioned to take advantage of this trend.

Semiconductor devices look set to continue shrinking device geometries, as well as expanding vertically into new 3D structures. As a result we believe our many UV laser sources (such as Azure, Paladin, Avia, Rapid, ExiStar, and OPSL) will continue to find increasing adoption, since their unique optical properties align well with the process demands of a nanometer scale world.

These same lasers, plus Monaco, Rapid, CO and CO₂ are also widely adopted for back end Advanced Packaging and Interconnect (API) applications. With dimension roadmaps showing a decade of dimension shrink on PCBs, interconnects, Silicon scribe widths and wafer thickness, driven by developments such as 5G, we believe that our portfolio of lasers aligns well with these demands as well as new processes that could be enabled by our lasers, to meet the increasing demands and decreasing tolerances of these markets.

While we experienced a softening of the demand in fiscal 2019 and fiscal 2020, we anticipate a resumption of investment in OLED manufacturing capacity. It is difficult to precisely determine the timing and impact of OLED investment on our fiscal 2021 and longer term revenues even as additional vendors ramp their OLED production rates.

Instrumentation

The bio instrumentation market's most important areas: flow cytometry, microscopy and DNA sequencing, are all enjoying solid growth on a worldwide basis with some local variations. In this field, our OPSL technology gives us differentiated products at a number of important wavelengths. This advantage coupled with strong focus on meeting our customers' demands for more compact and cost effective sources as well as integrated laser sub-systems has resulted in growth for us in this market and we expect that to continue.

In the therapeutic area, we see stable business with several opportunities for growth. We supply excimer lasers used in refractive eye surgery and are actively involved in further developments in laser vision correction. We also have opportunities in dental procedures for both hard and soft tissue applications, with greatly improved patient comfort and outcome. In the area of photocoagulation, our Genesis OPSL yellow lasers are being used since the wavelength is particularly suitable for the treatment of blood vessels. We are an OEM supplier of $\rm CO_2$ and semiconductor lasers to the major manufacturers of equipment used in the latest aesthetic procedures.

Worldwide scientific funding is expected to remain relatively stable, with some regions growing and others holding their current level. Potential growth areas include the strong push in neuroscience to better understand how the brain functions. Lasers play a very important role in imaging brain structure as well as

tracking activity in animal brains using techniques such as optogenetics. We believe that our current and upcoming products are well positioned to take advantage of this exciting opportunity. In physics and chemistry applications, our recent product introductions of high performance and industrially hardened ultrafast products have been very well received. While this is a very competitive market, we expect that our new products will position us for growth.

Precision Manufacturing

The materials processing market is the most diverse of all the markets we serve and a large cross section of our products are used in this market. Going forward, we will focus on Precision Manufacturing, a subset of the Materials Processing market, where we participate well both in terms of market share and margins on all three levels of components, lasers and systems. We will be focusing our R&D and our manufacturing capabilities towards new products that will serve higher margin, defendable markets. We sell components, laser sources and complete laser systems. There are many drivers at play, but at a high level they involve faster processing with higher yields, processing of new materials, more environmentally friendly processes and higher precision.

The automotive industry is undergoing rapid changes that present opportunities for further use of lasers. Trends such as reduction in emissions from lighter cars and electric vehicles require new materials and new processes for welding, cutting and drilling. We believe this will lead to further adoption of lasers and tools based on high power fiber and diode lasers, as well as ultrafast and CO_2 lasers. In particular, we believe our ARM laser technology offers competitive advantages versus alternative solutions.

We expect to see select opportunities for our products in the machine tools industry in a variety of broad-based applications including newer applications such as laser cladding and heat treatment.

In the consumer goods market, we serve a large variety of applications in various industries, such as packaging, digital printing, jewelry, textiles, security and consumer electronics. We serve these industries with a broad offering of our products from lasers to laser tools. As a consequence, this market represents a stable and growing opportunity for us.

We supply the medical device market with a variety of lasers and laser systems in applications such as fine cutting and welding as well as marking. This market is set to continue to grow in the foreseeable future as the population becomes older and advanced medical procedures spread outside the traditional markets in US, Europe and Japan.

Aerospace and defense

Governments have made and continue to make investments in the development of directed energy systems, both offensive and defensive. We have a number of product offerings which support these development efforts. A key differentiator for us in this market is a US based supply chain for all critical components, many of which are vertically integrated within Coherent, which we believe is unique in the industry. Our U.S. Defense customers have made it clear that a secure, U.S. based supply chain is and will be required moving forward. Our fabrication process includes epitaxial growth for our own laser diodes and packaged diodes in the U.S. and we also supply the specialty single mode amplifier fiber, critical for every directed energy amplifier. We own several other businesses that make critical components and on July 31, 2020, we reached an agreement to purchase Electro-optics Technology, Inc., a highly specialized U.S.-based components company, which will enable us to vertically integrate and improve the performance of our directed energy amplifier technology. We expect the acquisition to close in the second quarter of fiscal 2021, after we clear all regulatory requirements.

MARKET APPLICATIONS

We design, manufacture and market lasers, laser tools, precision optics and related accessories for a diverse group of customers. The following table lists our major markets and the Coherent technologies serving these markets, based on our market applications in fiscal 2020.*

Market	Application	Technology	
Microelectronics	Flat panel display	CO, CO ₂ DPSS Excimer Ultrafast Semiconductor Laser Sub-systems	
	Semiconductor front-end	CO ₂ DPSS OPSL Excimer Ion Laser Sub-systems	
	Advanced packaging and interconnects	CO, CO ₂ DPSS Excimer Ultrafast Laser Sub-systems	
Materials processing	Automotive	CO ₂ ARM Fiber Laser Systems/ Laser Sub-systems Ultrafast	
	Machine Tools	CO ₂ ARM Fiber DPSS Ultrafast Laser Systems/ Laser Sub-systems	
	Medical Device	CO ₂ DPSS Fiber Ultrafast Excimer Laser Systems/ Laser Sub-systems Components	
	Consumer Goods	CO CO ₂ Fiber DPSS Ultrafast Laser Systems/ Laser Sub-systems	
OEM components and instrumentation	Bio-Instrumentation	DPSS OPSL Ultrafast Semiconductor	
	Graphic arts and display	OPSL Semiconductor	
	Medical therapy (OEM)	CO, CO ₂ DPSS	

Market Application		Technology	
		Ultrafast	
		Excimer	
		OPSL	
		Semiconductor	
		Components	
	Defense and aerospace	Fiber Laser Amplifiers	
		Semiconductor	
		Components	
Scientific and government	All scientific applications	CO, CO_2	
programs		DPSS	
		Excimer	
		OPSL	
		Ultrafast	

^{*} Coherent sells its laser measurement and control products into a number of these applications.

In addition to the products we provide, we invest routinely in the core technologies needed to create substantial differentiation for our products in the marketplace. Our semiconductor, crystal, fiber and large form factor optics facilities all maintain an external customer base providing value-added solutions. We direct significant engineering efforts to produce unique solutions targeted for internal consumption. These investments, once integrated into our broader product portfolio, provide our customers with uniquely differentiated solutions and the opportunity to substantially enhance the performance, reliability and capability of the products we offer.

TECHNOLOGIES

Diode-pumped solid-state lasers (DPSS)

DPSS lasers use semiconductor lasers to pump a crystal to produce a laser beam. By changing the energy, optical components and the types of crystals used in the laser, different wavelengths and types of laser light can be produced.

The efficiency, reliability, longevity and relatively low cost of DPSS lasers make them ideally suited for a wide range of OEM and end-user applications, particularly those requiring 24-hour operations. Our DPSS systems are compact and self-contained sealed units. Unlike conventional tools and other lasers, our DPSS lasers require minimal maintenance since they do not have internal controls or components that require adjusting and cleaning to maintain consistency. They are also less affected by environmental changes in temperature and humidity, which can alter alignment and inhibit performance in many systems.

We manufacture a variety of DPSS laser types for different applications including semiconductor inspection; advanced packaging and interconnects; laser pumping; spectroscopy; bio-agent detection; DNA sequencing; drug discovery; flow cytometry; entertainment lighting (display); medical; rapid prototyping and marking, welding, engraving, cutting and drilling.

Fiber Lasers, Fiber Components and Fiber Assemblies

Fiber lasers use semiconductor lasers to pump a doped optical fiber to produce a laser beam. The unique features of a fiber laser make them suitable for producing high power, continuous wave laser beams. Our emphasis is on the design and manufacture of highly differentiated fiber lasers that provide advantages and/or are enabling in certain applications. For example, our ARM laser offers dynamically adjustable beam profiles that improve welding results compared to standard fiber lasers and is able to weld new composite materials.

We are the world's leading OEM supplier of Active Fiber for fiber lasers — selected for our combination of high performance and consistent quality. In addition, we are a volume supplier of Specialty Passive Fiber, High Power Fiber Cables, Fiber Switches, Fiber-to-Fiber Couplers, amplifiers for directed energy

applications and OEM Medical Fiber Assemblies. We produce our Medical assemblies in high volume in one of our ISO 13485 certified plants. In addition, many of the fiber components offered in the broader market, such as Fiber Bragg Gratings and Fiber Combiners, have our fiber components in them.

Gas lasers (CO, CO₂, Excimer, Ion)

The breadth of our gas laser portfolio is industry leading, encompassing CO, CO₂, excimer and ion laser technologies. Gas lasers derive their name from the use of one or more gases as a lasing medium. They collectively span an extremely diverse and useful emission range, from the very deep ultraviolet to the far infrared. This diverse range of available wavelengths, coupled with high optical output power, and an abundance of other attractive characteristics, makes gas lasers extremely useful and popular for a variety of microelectronics, scientific, therapeutic and materials processing applications. For example, the CO₂ and CO lasers are unique in their ability to process non-metal materials.

Optically Pumped Semiconductor Lasers ("OPSL")

Our OPSL platform is a surface emitting semiconductor laser that is energized or pumped by a semiconductor laser. The use of optical pumping circumvents inherent power scaling limitations of electrically pumped lasers, enabling very high powered devices. A wide range of wavelengths can be achieved by varying the semiconductor materials used in the device and changing the frequency of the laser beam using techniques common in solid state lasers. The platform leverages high reliability technologies developed for telecommunications and produces a compact, rugged, high power, single-mode laser.

Our OPSL products are well suited to a wide range of applications, including the bio-instrumentation, therapeutics and graphic arts and display markets.

Semiconductor lasers

High power edge emitting semiconductor diode lasers use the same principles as widely-used CD and DVD lasers, but produce significantly higher power levels. The advantages of this type of laser include smaller size, longer life, enhanced reliability and greater efficiency. We manufacture a wide range of discrete semiconductor laser products with wavelengths ranging from 650nm to over 1000nm and output powers ranging from 1W to over 100W, with highly integrated products in the kW range. These products are available in a variety of industry standard form factors including the following: bare die, packaged and fiber coupled single emitters and bars, monolithic stacks and fully integrated modules with microprocessor controlled units that contain power supplies and active coolers.

Our semiconductor lasers are used internally as the pump lasers in DPSS, fiber and OPSL products that are manufactured by us, as well as a wide variety of external medical, OEM, defense and industrial applications, including aesthetic (hair removal, cosmetic dentistry), graphic arts, counter measures, rangefinders, target designators, cladding, hardening, brazing and welding.

Ultrafast ("UF") Lasers

UF lasers are lasers generating light pulses with durations of a few femtoseconds (10^{-15} seconds) to a few tens of picoseconds (10^{-12} seconds). These types of lasers are used for medical, advanced microelectronics and materials processing applications as well as scientific research. UF laser oscillators generate a train of pulses at 50-100 MHz, with peak powers of tens of kilowatts, and UF laser amplifiers generate pulses at 1-2000 kHz, with peak powers up to several Terawatts.

The extremely short duration of UF laser pulses enables temporally resolving fast events like the dynamics of atoms or electrons. In addition, the high peak power enables so-called non-linear effects where several photons can be absorbed by a molecule at the same time. This type of process enables applications like multi-photon excitation microscopy or ablation of materials with high precision and minimal thermal damage. The use of our ultrafast lasers in applications outside science continued to grow as it offers unparalleled quality of results, particularly in microelectronics and materials processing applications.

Integrated Laser Solutions: Systems and Sub-systems

In most cases, our lasers are integrated into machine tools or systems to perform a specific task, e.g. manufacturing of electronic components or performing a procedure on a patient. Inside the system the laser is typically combined with delivery optics and beam steering devices, such as galvos, to deliver the laser beam to the workpiece.

In addition to offering laser sources, we also offer solutions comprising beam delivery optics, mechanics and control electronics including software. We believe that these 'sub-systems' allow us to leverage our expertise in laser processing and optical design into superior solutions for our customers, with applications that can offer higher value and/or faster time to market. We have developed proprietary hardware, firmware and software in this area. Laser sub-systems often include vision systems, process monitoring and monitoring of the system itself. Our sub-system products include: PowerLine series for marking; the StarFiber for welding and cutting; the PWS welding system; the QFS laser scribing system; and the StarShape $\rm CO_2$ laser-based systems.

In select cases we also offer complete laser systems which include the laser sub-system as well as a material handling system inside a class 1 laser safety enclosure, ready to be used in production or development environments. Our laser systems products include: the Performance, Select and Integral series of manual welding systems; the Exact, UW and MPS series of modular and highly configurable laser processing systems; the EasyMark, EasyJewel, LabelMarker Advanced and Combiline laser marking systems; the META laser cutting tools; and the PWS mini welding system.

SALES AND MARKETING

We primarily market our products in the United States through a direct sales force. We sell internationally through direct sales personnel located in Australia, Canada, China, France, Germany, Israel, Italy, Japan, the Netherlands, South Korea, Singapore, Spain, Taiwan, and the United Kingdom, as well as through independent representatives in certain jurisdictions around the world. Our foreign sales are made principally to customers in South Korea, China, Germany, Japan, and other European and Asia-Pacific countries. Foreign sales accounted for 76% of our net sales in fiscal 2020, 76% of our net sales in fiscal 2019, and 84% of our net sales in fiscal 2018. Sales made to independent representatives and distributors are generally priced in U.S. Dollars. A large portion of foreign sales that we make directly to customers are priced in local currencies and are therefore subject to currency exchange fluctuations. Foreign sales are also subject to other normal risks of foreign operations such as protective tariffs, export and import controls, and political instability.

We had one customer, Advanced Process Systems Corporation, who contributed more than 10% of revenue during fiscal 2020, 2019, and 2018.

To support our sales efforts we maintain and continue to invest in a number of applications centers around the world, where our applications experts work closely with customers on developing laser processes to meet their manufacturing needs. The applications span a wide range, but are mostly centered around the materials processing and microelectronics markets. Locations include several facilities in the US, Europe, and Asia.

We maintain customer support and field service staff in major markets within the United States, Europe, Japan, China, Singapore, South Korea, Taiwan, Vietnam, and other Asia-Pacific countries. This organization works closely with customers, customer groups and independent representatives in servicing equipment, training customers to use our products and exploring additional applications of our technologies.

We typically provide parts and service warranties on our lasers, laser-based systems, optical and laser components and related accessories and services. The length of warranties offered on our products and services varies, but primarily ranges from 12 to 24 months. Warranty reserves, as reflected on our consolidated balance sheets, have generally been sufficient to cover product warranty repair and replacement costs. The weighted average warranty period covered in our reserve is approximately 15 to 18 months.

MANUFACTURING

Since the acquisition of Rofin in November 2016, we have integrated Rofin into our organizational structure and both legacy organizations are operating as one company with common high level objectives, goals and processes. Strategies are being implemented to improve operating leverage, to execute synergies and to enhance our customers' experience. For example, in June 2019, we announced our plans to exit a portion of our HPFL business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain HPFL activities from our Hamburg, Germany facility. In fiscal 2020, we reorganized our reporting structure so that all business units now report to our Executive Vice President and Chief Operating Officer. Common policies and guidelines have been communicated, key management and operating processes have been implemented and ERP systems at all of Rofin's sites in Asia and North America, and certain sites in Europe, including all significant manufacturing sites, have been integrated onto the same Oracle ERP and Agile planning platforms, consistent with the rest of Coherent. This integration process will continue into fiscal 2021.

Strategies

One of our core manufacturing strategies is to tightly control our supply of key parts, components, sub-assemblies, and outsourcing partners. We utilize vertical integration when we have proprietary internal capabilities that are not cost-effectively available from external sources. We believe this is essential to maintaining high quality products and enable rapid development and deployment of new products and technologies. We are committed to providing customers with products manufactured at the highest level of quality and reliability by continuously improving our quality management system and adhering to processes that are International Organization for Standardization ("ISO") certified at our principal manufacturing sites.

Our commitment to Operational Excellence and continuous improvement is at the core of our Coherent Lean culture aimed at creating value for our customers. We propagate our Coherent Lean culture throughout operations by developing a common Lean system, developing lean knowledge, tools, skills, and global standardization and we empower our employees drive change through best practice sharing

Committed to quality and customer satisfaction, we design and produce many of our own components and sub-assemblies in order to retain quality and performance control. We have also outsourced certain components, sub-assemblies and finished goods where we can maintain our high quality standards while improving our cost structure.

As part of our strategy to increase our market share and customer support in Asia as well as our continuing efforts to manage costs, we continue to transfer the production of targeted products into both of our Singapore and Malaysia factories. Our increased our tube refurbishment capacity in our South Korea operations has allowed us to reduce service response time, carry strategic inventory, and provide benefits to us and to our customers throughout the APAC region. Our Asia material sourcing strategy driven by our International Procurement Office in Singapore continues to expand, which has enabled us to leverage spend and reduce material costs on a global basis.

We have designed and implemented proprietary manufacturing tools, equipment and techniques in an effort to provide products that differentiate us from our competitors. These proprietary manufacturing techniques are utilized in a number of our product lines including our gas laser production, crystal growth, beam alignment as well as the wafer growth for our semiconductor, optically pumped semiconductor laser product family and fiber component and fiber laser product family.

Raw materials or sub-components required in the manufacturing process are generally available from several sources. However, we currently purchase several key components and materials, including exotic materials, crystals and optics, used in the manufacture of our products 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, lasers and laser-based systems.

For a discussion of the importance to our business of, and the risks attendant to sourcing, see "Risk Factors" in item 1A — "We depend on sole source or limited source suppliers, as well as on our own

production capabilities, for some of the key components and materials, including exotic materials, certain cutting-edge optics and crystals, used in our products, which makes us susceptible to supply shortages or price fluctuations that could adversely affect our business, particularly our ability to meet our customers' delivery requirements."

Operations

Our products are manufactured at our sites in California, Oregon, Arizona, Michigan, New Jersey, Connecticut, and New Hampshire in the U.S.; Germany, Scotland, Finland, Sweden, Switzerland, and Spain in Europe; and South Korea, China, Singapore, and Malaysia in Asia. In addition, we also use contract manufacturers in southeast Asia and Eastern Europe for the production of certain assemblies and turnkey solutions.

Our ion gas lasers, a portion of our DPSS lasers that are used in microelectronics, scientific research and materials processing applications, semiconductor lasers, OPS lasers and ultrafast scientific lasers are manufactured at our Santa Clara, California site. Our laser diode module products, laser instrumentation products, test and measurement equipment products are manufactured in Wilsonville, Oregon. We manufacture exotic crystals in Mount Olive, New Jersey and both active and passive fibers are manufactured in our Salem, New Hampshire facility. Our low power CO₂ and CO gas lasers are manufactured in Bloomfield, Connecticut. We manufacture a portion of our DPSS lasers used in microelectronics and OEM components and instrumentation applications in Lübeck, Germany. We manufacture a portion of our DPSS lasers used in microelectronics, OEM components and instrumentation and materials processing applications in Kaiserslautern, Germany. Our excimer gas laser products are manufactured in Göttingen, Germany. We refurbish excimer tubes at our manufacturing sites in An-Seong, South Korea.

We manufacture the fiber-based lasers and a portion of our DPSS lasers used in microelectronics and scientific research applications in Glasgow, Scotland. Our facility in Sunnyvale, California grows the aluminum-free materials that are incorporated into our semiconductor lasers. Our facility in Richmond, California manufactures high performance optical components and assemblies for the aerospace and defense industries as well as large form optics for astronomical observatories and our own Linebeam excimer laser annealing systems. We manufacture and test high-power CO₂, solid-state and fiber laser macro products in Hamburg, Germany; Plymouth, Michigan; East Granby, Connecticut; Tampere, Finland; and Nanjing, China. Our laser marking products are manufactured and tested in Gilching-Munich, Germany; and Singapore. Our micro application products are manufactured and tested in Gilching-Munich, Germany; Tampere, Finland; Plymouth, Michigan; and Belp, Switzerland. Our diode laser products are manufactured and tested in Mainz and Freiburg, Germany; Tucson, Arizona (scheduled to close during fiscal 2021 by transferring the related product manufacturing to other sites); and Nanjing, China. Anodization of our Slab laser electrodes is performed in Overath, Germany. Our fiber optics and beam delivery systems are manufactured and tested in Molndal, Sweden. The Company's active and passive fibers and high power laser amplifiers are manufactured and tested in East Granby, Connecticut. Optical engines for fiber lasers, fiber lasers modules and wafer material are designed and manufactured in Tampere, Finland. We manufacture and test the laser tools for the Metal Additive Manufacturing (3D Printing) market in Dieburg, Germany and we manufacture critical components for diode lasers in Monrovia, California.

We have transferred several products and sub-assemblies for manufacture and repairs to our Singapore, Malaysia and Nanjing, China facilities and are continuing to transfer additional product manufacturing to these facilities as part of our worldwide manufacturing cost reduction strategy.

Coherent is committed to meeting internationally standards for the design, manufacture and service of products to industry-based requirements. All primary facilities are certified to ISO 9001 whereas others hold multiple certifications based upon the markets they serve including ISO 13485, ISO 14001, ISO 17025, ISO 45001 and/or ISO 50001.

INTELLECTUAL PROPERTY

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. As of October 3, 2020, we held approximately 880 U.S. and foreign patents, which expire in calendar years 2020 through 2039 (depending on the payment of

maintenance fees) and we have approximately 185 additional pending patent applications that have been filed. The issued patents cover various products in all of the major markets that we serve.

Some of our products are designed to include intellectual property licensed from third parties. It may be necessary in the future to seek or renew licenses relating to aspects of our products, processes and services. While we have generally been able to obtain such licenses on commercially reasonable terms in the past, there is no guarantee that such licenses could be obtained on reasonable terms in the future or at all.

For a discussion of the importance to our business of, and the risks attendant to intellectual property rights, see "Risk Factors" in Item 1A — "If we are unable to protect our proprietary technology, our competitive advantage could be harmed" and "We have been and may, in the future, be subject to claims or litigation from third parties, for claims of infringement of their proprietary rights or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors or other rights holders. These claims could result in costly litigation and the diversion of our technical and management personnel. Adverse resolution of litigation may harm our operating results or financial condition."

COMPETITION

Competition in the various photonics markets in which we provide products is very intense. We compete against a number of large public and private companies including IPG Photonics Corporation, Lumentum Holdings Inc., MKS Instruments, Inc., Novanta Inc., nLIGHT, Inc., II-VI Incorporated, Wuhan Raycus Fiber Laser Technologies Co., Ltd, and TRUMPF GmbH, as well as other smaller companies. In addition, from time to time our customers may also decide to vertically integrate and build their own photonics products. We compete globally based on our broad product offering, reliability, cost, and performance advantages for the widest range of commercial and scientific research applications. Other considerations by our customers include warranty, global service and support and distribution.

BACKLOG

At fiscal 2020 year-end, our backlog of orders scheduled for shipment (within one year) was \$548.0 million compared to \$502.1 million at fiscal 2019 year-end. By segment, backlog for OLS was \$354.5 million and \$309.5 million at fiscal 2020 and 2019 year-ends, respectively. Backlog for ILS was \$193.5 million and \$192.6 million at fiscal 2020 and 2019 year-ends, respectively. The increase in OLS backlog from fiscal 2019 to fiscal 2020 year-end was primarily due to higher orders for excimer laser annealing systems for the flat panel display market as well as higher orders for service. The increase in ILS backlog from fiscal 2019 to fiscal 2020 year-end was primarily due to higher orders in the materials processing market partially offset by lower orders in the high power fiber laser market. Orders used to compute backlog are generally cancellable and, depending on the notice period, are subject to rescheduling by our customers. We have not historically experienced a significant rate of cancellation or rescheduling, however the rate of cancellations or rescheduling may increase in the future. In the first quarter of fiscal 2019, one customer cancelled three purchase orders which included orders shippable within 12 months from fiscal 2018 year-end of \$38.2 million and were included in backlog as of fiscal 2018 year-end. We reached agreement with this customer for compensation for such cancellation in the first quarter of fiscal 2019.

SEASONALITY

We have historically generally experienced decreased revenue in the first fiscal quarter compared to other quarters in our fiscal year due to the impact of time off and business closures at our facilities and those of many of our customers due to year-end holidays. For example, over the past 10 years, excluding certain recovery years, our first fiscal quarter revenues have ranged 2%-17% below the fourth quarter of the prior fiscal years. This historical pattern should not be considered a reliable indicator of the Company's future net sales or financial performance.

EMPLOYEES

Our workforce is distributed globally over 19 countries. As of fiscal 2020 year-end, we had approximately 4,875 employees worldwide, with approximately 827 located in the Asia-Pacific region, 2,500 in the EMEA region, and 1,548 in the Americas region. Of our total workforce, approximately 597 employees are involved

in research and development; 3,120 employees are involved in operations, manufacturing, service and quality assurance; and 1,158 employees are involved in sales, order administration, marketing, finance, information technology, general management and other administrative functions. Our success will depend in large part upon our ability to attract and retain employees. We face competition in this regard from other companies, research and academic institutions, government entities and other organizations. We consider our relations with our employees to be good.

Our human capital is governed by various federal, state and local regulations. We monitor all key employment activities, such as hiring, termination and pay practices to ensure compliance with established regulations across the world. We embrace diversity and inclusion and strive to provide an environment rich with diverse skills, backgrounds and perspectives. Within the United States we conduct a yearly review of employees and establish hiring goals for minority, female, disabled and military veteran candidates. Our recruitment programs are regionally focused and hiring is done at a local level to ensure compliance with specific regulations. To ensure diversity within our workforce we advertise job openings and source candidates broadly to attract a diverse candidate pool. As a leader in our industry we are able to attract a strong candidate pool and have been successful in filling vacancies to ensure business continuity. In fiscal 2020 we had 350 new hires, 155 of which were within the EMEA region, 134 of which were within the Americas region and 61 of which were in the Asia-Pacific region. During fiscal 2020, we also conducted a worldwide organizational health survey designed to assess employee engagement, leadership, work environment and culture. We had a response rate of 77% of our total worldwide employee base, which is one indicator of a high-level of employee engagement.

We track and report internally on key talent metrics including workforce demographics, talent pipeline, diversity data, and engagement of our employees. We believe in investing in professional development programs to ensure we provide opportunities for individuals to advance their careers either in a technical track or move to a leadership position. We offer many of our in-class training programs digitally so that more employees can benefit from self-development during a period when many of our employees are working remotely. Additional focus is placed on the development of our future leaders and we leverage a talent review process where high-potential and high-performing employees are assessed for future leadership roles as part of our succession management process for critical leadership positions. As employee turnover is an indicator of employee satisfaction we closely monitor turnover globally and benchmark locally. Coherent has a very stable and committed workforce. This translates into very low voluntary turnover when compared to benchmark data. Our 12 month rolling average for voluntary turnover at the end of fiscal 2020 stood at 5.2%, substantially less than benchmark data. Our employee average tenure globally is more than 10 years.

ACQUISITIONS

On October 5, 2018, we acquired privately held Ondax for approximately \$12.0 million, excluding transaction costs. Ondax develops and produces photonic components which are used on an OEM basis by the laser industry as well as incorporated into its own stabilized lasers and Raman Spectroscopy systems.

On October 5, 2018, we acquired certain assets of Quantum for approximately \$7.0 million, excluding transaction costs.

On March 8, 2018, we acquired privately held OR Laser for approximately \$47.4 million, excluding transaction costs. OR Laser produces laser-based material processing equipment for a variety of uses, including additive manufacturing, welding, cladding, marking, engraving and drilling.

Please refer to Note 4, "Business Combinations" of Notes to Consolidated Financial Statements under Item 8 of this annual report for further discussion of recent acquisitions completed.

RESTRUCTURINGS AND CONSOLIDATION

In the first quarter of fiscal 2017, we began the implementation of planned restructuring activities in connection with the acquisition of Rofin. The activities to date under this plan primarily related to exiting our legacy high power fiber laser product line, change of control payments to Rofin officers, the exiting of two product lines acquired in the acquisition of Rofin, realignment of our supply chain due to segment reorganization and consolidation of sales and distribution offices as well as certain manufacturing sites.

These activities resulted in charges primarily for employee termination, other exit related costs associated with the write-off of property and equipment and inventory and early lease termination costs.

The fiscal 2018 severance related costs are primarily comprised of severance pay for employees being terminated due to the consolidation of certain manufacturing sites. The fiscal 2018 asset write-offs are primarily comprised of inventory and equipment write-offs due to the consolidation of certain manufacturing sites.

In June 2019, we internally announced our plans to exit a portion of our HPFL business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain HPFL activities from our Hamburg, Germany facility. In conjunction with this announcement, we recorded restructuring charges in fiscal 2019 of \$19.7 million. The charges primarily related to write-offs of excess inventory, which is recorded in cost of sales, and estimated severance. We recorded charges of \$1.1 million in fiscal 2020, primarily related to accelerated depreciation and project management consulting.

We also vacated our leased facility in Santa Clara at the end of the lease term on July 31, 2020 and combined operations into our owned Santa Clara headquarters. We did not incur material expenses in fiscal 2019 related to this project. In fiscal 2020, we incurred costs of \$1.5 million, primarily related to accelerated depreciation.

In the fourth quarter of fiscal 2020, we began a restructuring program in our ILS segment which includes management reorganizations, the planned closure of certain manufacturing sites, and the right-sizing of global sales, service, order admin, marketing communication and certain administrative functions, among others. In the fourth quarter of fiscal 2020, we incurred costs of \$2.6 million, primarily related to severance.

See Note 19, "Restructuring Charges" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

GOVERNMENT REGULATION

We are required to comply, and it is our policy to comply, with numerous regulations that are normal and customary to businesses in our industry and that operate in our markets and operating locations. These regulations relate to, among other things, healthcare, environmental protection, antitrust, anti-corruption, marketing, fraud and abuse (including anti-kickback and false claims laws), export control, product safety and efficacy, employment, privacy, governmental contracts and regulatory matters specific to the defense industry and other areas.

Environmental regulation

Our operations are subject to various federal, state, local and foreign environmental regulations relating to the use, storage, handling and disposal of regulated materials, chemicals, various radioactive materials and certain waste products. In the United States, we are subject to the federal regulation and control of the Environmental Protection Agency. Comparable authorities are involved in other countries. We also face increasing complexity in our product design and procurement operations due to the evolving nature of environmental compliance regulations and standards, as well as specific customer compliance requirements. We expect all operations to meet the legal and regulatory environmental requirements and believe that compliance with those regulations will not have a material adverse effect on our capital expenditures, earnings and competitive and financial position.

Although we believe that our safety procedures for using, handling, storing and disposing of such materials comply with the standards required by federal and state laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

We further discuss the impact of environmental regulation under "Risk Factors" in Item 1A — "Compliance or the failure to comply with current and future environmental regulations could cause us significant expense."

Regulatory Compliance

Lasers that are manufactured or sold in the United States are classified under the applicable rules and regulations of the Center for Devices and Radiological Health ("CDRH") of the U.S. Food and Drug Administration ("FDA"). A similar classification system is applied in the European markets.

CDRH regulations require a self-certification procedure pursuant to which a manufacturer must submit a filing to the CDRH with respect to each product incorporating a laser, make periodic reports of sales and purchases, and comply with product labeling standards, product safety and design features and informational requirements. The CDRH is empowered to seek fines and other remedies for violations of their requirements. We believe that our products are in material compliance with the applicable rules and regulations of CDRH relating to lasers manufactured or sold in the United States.

In addition, certain portions of our business contract with numerous U.S. government agencies and entities or with entities whose projects are funded therefrom. We also contract with similar government authorities outside of the U.S., subject in all cases to applicable law. Consequently, we must comply with and are affected by regulations relating to the formation, administration, and performance of such U.S. government and other contracts governing such matters.

Exports of certain or 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 and to ITAR. Products and the associated technical data developed and manufactured in our foreign locations are subject to export controls of the applicable foreign nation. We further discuss the impact of such regulations under "Risk Factors" in Item 1A — "Governmental regulations, including tariffs and duties, affecting the import or export of products could negatively affect our business, financial condition and results of operations."

We are subject to laws concerning our business operations and marketing activities in foreign countries where we conduct business. For example, we are subject to the U.S. Foreign Corrupt Practices Act (the "FCPA"), U.S. export control and trade sanction laws, and similar anti-corruption and international trade laws in certain foreign countries, such as the U.K. Bribery Act. We further discuss the impact of such regulations under "Risk Factors" in Item 1A — "Violations of anti-bribery, anti-corruption, and/or international trade laws to which we are subject could negatively affect our business, financial condition and results of operations."

Aspects of our operations and business are subject to privacy, data security and data protection regulations, which impact the way we use and handle data and operate our products and services. We further discuss the impact of such regulations under "Risk Factors" in Item 1A — "We may face particular privacy, data security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data."

ITEM 1A. RISK FACTORS

You should carefully consider the followings risks when considering an investment in our common stock. These risks could materially affect our business, results of operations or financial condition, cause the trading price of our common stock to decline materially or cause our actual results to differ materially from those expected or those expressed in any forward-looking statements made by us. These risks are not exclusive, and additional risks to which we are subject include, but are not limited to, the factors mentioned under "Forward-Looking Statements" and the risk of our businesses described elsewhere in this annual report. Additionally, these risks and uncertainties described herein are not the only ones facing us. Other events that we do not currently anticipate or that we currently deem immaterial also may affect our business, results of operations or financial condition.

RISKS RELATED TO COVID-19 PANDEMIC

Our business, financial condition and results of operations for fiscal year 2020 and beyond have been and may continue to be materially adversely affected by the COVID-19 pandemic and the related private and public sector responses to the pandemic.

The full extent to which the COVID-19 pandemic will impact our financial condition and operating results will depend on future developments that are highly uncertain and cannot be accurately predicted, including COVID-19 infections intensifying or returning in various geographic areas as is currently happening in Europe and the United States, new medical and other information that may emerge concerning COVID-19, and the actions by governmental entities or others to address it, contain it or treat its impact.

COVID-19 poses the risk that we or our employees, suppliers, distributors, customers and others may be restricted or prevented from conducting business activities for indefinite or intermittent periods of time, including as a result of employee health and safety concerns, shutdowns, shelter-in-place ("SiP") orders, travel restrictions and other actions and restrictions that may be prudent or required by governmental authorities. Even after governmental entities have lifted SiP orders, there is a risk that such orders will be reinstated, making it difficult to predict the long term financial impact of this virus on the Company. Examples of this have been seen across the globe, including most recently in the actions by several European governments.

To date, many (but not all) of our business operations and those of our suppliers, distributors and customers have been classified as essential or otherwise permitted to operate in jurisdictions in which facility closures have been mandated; however, we can give no assurance that this will not change in the future or that we, our suppliers, distributors and customers will continue to be permitted to conduct business in each of the jurisdictions in which we operate.

In addition, we have modified our business practices for the continued health and safety of our employees — including, among other things, implementing a remote work policy to the fullest extent possible, a limited travel policy, the distribution of and mandatory wearing of personal protection equipment, reorganizing and adjusting the timing of manufacturing personnel shifts, temperature monitoring for entering our facilities, and a social distancing policy — and we may take further actions, or be required to take further actions, that are in the best interests of our employees. Our suppliers, distributors and customers have also implemented such measures, which has resulted in, and we expect it will continue to result in, disruptions or delays and higher costs. 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.

While we currently believe we have sufficient liquidity to manage the financial impact of the COVID-19 pandemic, we can give no assurance that this will continue to be the case if the pandemic is prolonged or if there is an extended impact on us or the economy generally. Further, the pandemic has caused significant uncertainty and volatility in the credit markets. If our liquidity or access to capital becomes significantly constrained, or if costs of capital increase significantly as result of volatility in the capital markets, a reduction in our creditworthiness or other factors, then our financial condition, results of operations and cash flows could be materially adversely affected.

We have invested and will continue to invest significant time and resources in managing the impact of the COVID-19 pandemic on our business. Our focus on managing and mitigating such impact may cause us to divert or delay the application of resources toward existing or new initiatives or investments, which could have a material adverse impact on our results of operations.

Please refer to "Coronavirus pandemic (COVID-19)" under "Significant Events" "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" for additional discussion of the risks related to the COVID-19 pandemic and its impact on the Company.

COMPANY AND OPERATIONAL RISKS

Our operating results and stock price have varied in the past and will continue to be subject to fluctuations in the future based upon numerous factors, including those discussed in this Item 1A and throughout this report.

Our operating results, including net sales, operating expenses, net income (loss) and adjusted EBITDA in dollars and as a percentage of net sales, as well as our stock price, have varied in the past and may vary significantly from quarter to quarter and from year to year in the future. We believe a number of factors, many of which are outside of our control, could cause these variations and make them difficult to predict, including:

- general economic uncertainties in the macroeconomic and local economies facing us, our customers and the markets we serve, particularly as COVID-19 continues to adversely affect the global economy;
- impact of government economic policies on macroeconomic conditions, such as recently instituted, proposed or threatened changes in trade policies by the U.S. and any corresponding retaliatory actions by affected countries, in particular with respect to China, as well as trade restrictions instituted by the Japanese government affecting the export to South Korea of certain products and materials used in the manufacture of flat panel displays and in the semiconductor industry;
- fluctuations in demand for our products or downturns in the industries that we serve, particularly the continued build-out of "phase 2" of the capacity for the manufacture of OLED and the increased use of the installed base of our products in such manufacturing;
- the ability of our suppliers, both internal and external, to produce and deliver components and parts, including sole or limited source components, in a timely manner, in the quantity, quality and prices desired;
- the timing of receipt of bookings and the timing of and our ability to ultimately convert bookings to net sales:
- the concentration of a significant amount of our backlog, and resultant net sales, with a few customers in the Microelectronics market;
- rescheduling of shipments or cancellation of orders by our customers;
- fluctuations in our product mix;
- the ability of our customers' other suppliers to provide sufficient material to support our customers' products;
- currency fluctuations and stability, in particular the Euro, the Japanese Yen, the South Korean Won, the Chinese RMB and the U.S. Dollar as compared to other currencies;
- · commodity pricing;
- interpretation and impact of the U.S. Tax Cuts and Jobs Act and the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act");
- introductions of new products and product enhancements by our competitors, entry of new competitors into our markets, pricing pressures and other competitive factors;
- the increasing focus by companies in China to vertically integrate and consolidate their supply chains fully with products manufactured in China;

- our ability to develop, introduce, manufacture and ship new and enhanced products in a timely manner without defects;
- our ability to manage our manufacturing capacity across our diverse product lines and that of our suppliers, including our ability to successfully expand our manufacturing capacity in various locations around the world:
- our ability to successfully and fully integrate acquisitions, such as the historical Rofin businesses, into our operations and management;
- our ability to successfully internally transfer the manufacturing of products and related operations as part of our integration and internal reorganization efforts and to realize anticipated benefits (including savings) therefrom;
- our reliance on contract manufacturing;
- our reliance in part upon the ability of our OEM customers to develop and sell systems that incorporate our laser products;
- our customers' ability to manage their susceptibility to adverse economic conditions;
- the rate of market acceptance of our new products;
- the ability of our customers to pay for our products;
- expenses associated with acquisition-related activities, including the costs of acquiring businesses or technologies;
- seasonal sales trends, including with respect to Rofin's historical business, which has traditionally experienced a reduction in sales during the first half of its fiscal year as compared to the second half of its fiscal year;
- jurisdictional capital and currency controls negatively impacting our ability to move funds from or to an applicable jurisdiction;
- access to applicable credit markets by us, our customers and their end customers;
- the impact of rising Chinese consumer debt and eroding consumer confidence and spending in China;
- delays or reductions in customer purchases of our products in anticipation of the introduction of new and enhanced products by us or our competitors;
- our ability to control expenses;
- the level of capital spending of our customers;
- potential excess and/or obsolescence of our inventory;
- costs and timing of adhering to current and developing governmental regulations and reviews relating to our products and business, including import and export regulations in multiple jurisdictions;
- impairment of goodwill, intangible assets and other long-lived assets;
- our ability to meet our expectations and forecasts and those of public market analysts and investors;
- the availability of research funding by governments with regard to our customers in the scientific business, such as universities:
- continued government spending on defense-related and scientific research projects where we are a vendor directly or as a subcontractor;
- maintenance of supply relating to products sold to the government on terms which we would prefer not to accept;
- changes in policy, interpretations, or challenges to the allowability of costs incurred under government cost accounting standards;

- changes in the method of determining the London Interbank Offered Rate ("LIBOR"), the Euro Interbank Offered Rate ("EURIBOR"), or the replacement of LIBOR or EURIBOR with an alternative reference rate, may adversely affect interest rates on our outstanding variable rate indebtedness:
- our ability and the ability of our contractual counterparts to comply with the terms of our contracts;
- damage to our reputation as a result of coverage in social media, Internet blogs or other media outlets:
- managing our and other parties' compliance with contracts in multiple languages and jurisdictions;
- managing our internal and third party sales representatives and distributors, including compliance with all applicable laws;
- costs, expenses and damages arising from litigation;
- the impact of market fluctuations on assets and liabilities in our deferred compensation plans;
- costs associated with designing around or payment of licensing fees associated with issued patents in our fields of business;
- individual employees intentionally or negligently failing to comply with our internal controls;
- government support of alternative energy industries, such as solar;
- negative impacts related to the United Kingdom's withdrawal from the European Union, or "Brexit", including uncertainties regarding the terms of applicable trade treaties between the United Kingdom and other countries, particularly with regard to any potential negative effects on our sales from our Glasgow, Scotland facility to other jurisdictions and purchases of supplies from outside the United Kingdom by such facility;
- negative impacts related to the recent independence movement in Catalonia, Spain, particularly with regard to holding and operating some of our foreign entities in an efficient manner from a tax, business and legal perspective;
- negative impacts related to government instability in any jurisdiction in which we operate, such as the recent difficulties in forming a governing coalition in Germany;
- the future impact of legislation, rulemaking, and changes in accounting, tax, defense procurement and export policies; and
- distraction of management related to acquisition, integration or divestment activities.

In addition, we often recognize a substantial portion of our sales in the last month of our fiscal quarters. Our expenses for any given quarter are typically based on expected sales, and if sales are below expectations in any given quarter, the adverse impact of the shortfall on our operating results may be magnified by our inability to adjust spending quickly enough to compensate for the shortfall. We also base our manufacturing on our forecasted product mix for the quarter. If the actual product mix varies significantly from our forecast, we may not be able to fill some orders during that quarter, which would result in delays in the shipment of our products. Accordingly, variations in timing of sales, particularly for our higher priced, higher margin products, can cause significant fluctuations in quarterly operating results.

Due to these and other factors, we believe that quarter-to-quarter and year-to-year comparisons of our historical operating results may not be meaningful. You should not rely on our results for any quarter or year as an indication of our future performance. Our operating results in future quarters and years may be below public market analysts' or investors' expectations, which would likely cause the price of our stock to fall. In addition, over the past several years, U.S. and global equity markets have experienced significant price and volume fluctuations that have affected the stock prices of many technology companies both in and outside our industry, and the ongoing COVID-19 pandemic could exacerbate such fluctuations. There has not always been a direct correlation between this volatility and the performance of particular companies subject to these stock price fluctuations. These factors, as well as general economic and political conditions or investors' concerns regarding the credibility of corporate financial statements, may have a material adverse effect on the market price of our stock in the future.

We depend on sole source or limited source suppliers, as well as on our own production capabilities, for some of the key components and materials, including exotic materials, certain cutting-edge optics and crystals, used in our products, which makes us susceptible to supply shortages or price fluctuations that could adversely affect our business, particularly our ability to meet our customers' delivery requirements.

We currently purchase several key components and materials used in the manufacture of our products from sole source or limited source suppliers. From time-to-time our customers require us to ramp up production and/or accelerate delivery schedules of our products, and our key suppliers may not have the ability to increase their production in line with our customers' demands. This can become acute during times of high growth in our customers' businesses. Our failure to timely receive these key components and materials would likely cause delays in the shipment of our products, which would likely negatively impact both our customers and our business. Some of these suppliers are relatively small private companies that may discontinue their operations at any time and may be particularly susceptible to prevailing economic conditions. Some of our suppliers are located in regions susceptible to natural and man-made disasters, such as Thailand which has experienced severe flooding, Japan which has experienced earthquakes, tsunamis and a resulting nuclear disaster, and the Eastern part of the United States and California which have experienced severe flooding, wildfires and/or power loss. In addition, our suppliers have been adversely affected by the COVID-19 pandemic and the related imposition of government restrictions to mitigate the spread of the virus. We typically purchase our components and materials through purchase orders or agreed upon terms and conditions, and we do not have guaranteed supply arrangements with many of these suppliers. For certain long-lead time supplies or in order to lock-in pricing, we may be obligated to place noncancellable purchase orders or otherwise assume liability for a large amount of the ordered supplies, which limits our ability to adjust down our inventory liability in the event of market downturns or other customer cancellations or rescheduling of their purchase orders for our products.

Some of our products, particularly in the flat panel 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 order 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.

Like most other multinational companies, we are also highly dependent upon the ability to ship products to customers and to receive shipments of supplies from suppliers. The COVID-19 pandemic and resulting government policies have resulted in variable limitations on our ability to receive supplies and ship our products to customers. In the event of a disruption in the worldwide or regional shipping infrastructure, our access to supplies and our ability to deliver products to customers would correspondingly be negatively impacted. Any such disruption would likely materially and adversely affect our operating results and financial condition.

Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, or our failure to properly manage these moves, would impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders. 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. Since many of our products have lengthy qualification periods, our ability to introduce multiple suppliers for parts may be limited. In addition, our failure to achieve adequate manufacturing yields of these items at our manufacturing facilities may materially and adversely affect our operating results and financial condition.

We participate in the microelectronics 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 microelectronics 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. In the event either our customers' or our products fail to gain market acceptance, or the microelectronics market fails to grow, it would likely have a significant negative effect on our business and results of operations.

We participate in the flat panel display market, which has a relatively limited number of end customer manufacturers. Our backlog, timing of net sales and results of operations could be negatively impacted in the event we face any significant periods with few or no orders or our customers reschedule or cancel orders.

In the flat panel display 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. In fiscal 2020, Advanced Process Systems Corporation, an integrator in the flat panel display market based in South Korea, contributed more than 10% of our revenue. 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. For example, in the fourth quarter of fiscal 2018, a customer requested a change of delivery date resulting in a significant order being rescheduled from the first to the second quarter of fiscal 2019. In addition, in the first quarter of fiscal 2019, one customer cancelled three purchase orders which included backlog shippable within 12 months of \$38.2 million as well as some additional orders which were unscheduled.

These larger flat panel-related systems have large average selling prices. Any significant periods with few or no orders or any rescheduling or canceling of such orders by our customers will likely have a significant impact on our quarterly or annual net sales and results of operations and could negatively impact inventory values and backlog. 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 net sales and results of operations.

Some of our laser systems are complex in design and may contain defects that are not detected until deployed by our customers, which could increase our costs and reduce our net sales.

Lasers and laser systems are inherently complex in design and require ongoing regular maintenance. The manufacture of our lasers, laser products and laser systems involves a highly complex and precise process. As a result of the technological complexity of our products, in particular our excimer laser annealing tools used in the flat panel display 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. To the extent that we do not achieve and maintain our projected yields or product reliability, our business, operating results, financial condition and customer relationships would be adversely affected. We provide warranties on a majority of our product sales, and reserves for estimated warranty costs are recorded during the period of sale. The determination of such reserves requires us to make estimates of failure rates and expected costs to repair or replace the products under warranty. We typically establish warranty reserves based on historical warranty costs for each product line. If actual return rates and/or repair and replacement costs differ significantly

from our estimates, adjustments to cost of sales may be required in future periods which could have an adverse effect on our results of operations.

Our customers may discover defects in our products after the products have been fully deployed and operated, including under the end user's peak stress conditions. In addition, some of our products are combined with products from other vendors, which may contain defects. As a result, should problems occur, it may be difficult to identify the source of the problem. If we are unable to identify and fix defects or other problems, we could experience, among other things:

- loss of customers or orders;
- 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, engineering and manufacturing resources; and
- · legal actions by our customers and/or their end users.

The occurrence of any one or more of the foregoing factors could seriously harm our business, financial condition and results of operations.

Continued volatility in the advanced packaging and semiconductor manufacturing markets could adversely affect our business, financial condition and results of operations.

A portion of our net sales in the microelectronics market depends on the demand for our products by advanced packaging applications and semiconductor equipment companies. These markets have historically been characterized by sudden and severe cyclical variations in product supply and demand, which have often severely affected the demand for semiconductor manufacturing equipment, including laser-based tools and systems. The timing, severity and duration of these market cycles are difficult to predict, especially during the ongoing COVID-19 pandemic, and we may not be able to respond effectively to these cycles. The continuing uncertainty in these markets severely limits our ability to predict our business prospects or financial results in these markets.

During industry downturns, our net sales from these markets may decline suddenly and significantly. Our ability to rapidly and effectively reduce our cost structure in response to such downturns is limited by the fixed nature of many of our expenses in the near term and by our need to continue our investment in next-generation product technology and to support and service our products. In addition, due to the relatively long manufacturing lead times for some of the systems and subsystems we sell to these markets, we may incur expenditures or purchase raw materials or components for products we cannot sell. Accordingly, downturns in the semiconductor capital equipment market may materially harm our operating results. Conversely, when upturns in these markets occur, we must be able to rapidly and effectively increase our manufacturing capacity to meet increases in customer demand that may be extremely rapid, and if we fail to do so we may lose business to our competitors and our relationships with our customers may be harmed.

Our future success depends on our ability to increase our sales volumes and decrease our costs to offset potential declines in the average selling prices of our products and, if we are unable to realize greater sales volumes and lower costs, our operating results may suffer.

Our ability to increase our sales volume and our future success depends on the continued growth of the markets for lasers, laser systems and related accessories, as well as our ability to identify, in advance, emerging markets for laser-based systems and to manage our manufacturing capacity to meet customer demands. We cannot assure you that we will be able to successfully identify, on a timely basis, new high-growth markets in the future. Moreover, we cannot assure you that new markets will develop for our products or our customers' products, or that our technology or pricing will enable such markets to develop. Future demand for our products is uncertain and will depend to a great degree on continued technological development and the introduction of new or enhanced products. If this does not continue, sales of our products may decline and our business will be harmed.

We have in the past experienced decreases in the average selling prices ("ASPs") of some of our products. As competing products become more widely available or lower-cost products come to market, the ASPs of our products may decrease. If we are unable to offset any decrease in our ASPs by increasing our sales volumes, our net sales will decline. In addition, to maintain our gross margins, we must continue to reduce the cost of manufacturing our products while maintaining their high quality. From time to time, our products, like many complex technological products, may fail in greater frequency than anticipated. This can lead to further charges, which can result in higher costs, lower gross margins and lower operating results. Furthermore, as ASPs of our current products decline, we must develop and introduce new products and product enhancements with higher margins. If we cannot maintain our gross margins, our operating results could be seriously harmed, particularly if the ASPs of our products decrease significantly.

We face risks associated with our worldwide operations and sales that could harm our financial condition and results of operations.

For fiscal 2020, 2019 and 2018, 76%, 76%, and 84%, respectively, of our net sales were derived from customers outside of the United States. We anticipate that international sales, particularly in Asia, will continue to account for a significant portion of our net sales in the foreseeable future.

A global economic slowdown or a natural disaster could have a negative effect on various international markets in which we operate, such as the earthquake, tsunami and resulting nuclear disaster in Japan and the flooding in Thailand. Such a slowdown may cause us to reduce our presence in certain countries, which may negatively affect the overall level of business in such countries. Our international sales are primarily through our direct sales force. Additionally, some international sales are made through international distributors and representatives. Currently, the COVID-19 pandemic is having a significant adverse effect on the global economy, which is affecting the various markets in which we operate.

Our international operations and sales are subject to a number of risks, including:

- compliance with applicable import/export regulations, tariffs and trade barriers, including recently instituted or proposed changes in trade policies by the U.S. and any corresponding retaliatory actions by affected countries, in particular with respect to China;
- longer accounts receivable collection periods;
- the impact of recessions and other economic conditions in economies outside the United States, including, for example, recent dips in the manufacturing Purchasing Managers' Index ("PMI") as well as the Institute of Supply Management ("ISM") data in the Eurozone, in particular in Germany;
- unexpected changes in regulatory requirements and compliance with applicable regulatory requirements;
- · product certification requirements;
- environmental regulations;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- political and economic instability, such as the current situation between the governments of Japan and South Korea, which has led to the imposition of trade restrictions by the Japanese government affecting the export to South Korea of certain products and materials used in the manufacture of flat panel displays and in the semiconductor industry;
- compliance with applicable United States and foreign anti-corruption laws;
- less than favorable contract terms;
- reduced ability to enforce contractual obligations;
- · cultural and management differences;
- reliance in some jurisdictions on third party sales channel partners;
- · preference for locally produced products; and

• shipping and other logistics complications.

Our business could also be impacted by international conflicts, terrorist and military activity including, in particular any such conflicts on the Korean peninsula, civil unrest and pandemics, any of which could cause a slowdown in customer orders, cause customer order cancellations or negatively impact availability of supplies or limit our ability to timely service our installed base of products.

We are also subject to the risks of fluctuating foreign currency exchange rates, which could materially adversely affect the sales price of our products in foreign markets, as well as the costs and expenses of our international subsidiaries, particularly if we have a significant amount of manufacturing costs denominated in one currency, e.g. the Euro, compared to the sales of those same products to customers denominated in another currency, e.g. the U.S. Dollar. While we use forward exchange contracts and other risk management techniques to hedge our foreign currency exposure, we remain exposed to the economic risks of foreign currency fluctuations.

We depend on skilled personnel to operate our business effectively in a rapidly changing market, and if we are unable to retain existing or hire additional personnel when needed, or manage transitions among members of our leadership team, our ability to develop and sell our products could be harmed.

Our ability to continue to attract and retain highly skilled personnel will be a critical factor in determining whether we will be successful in the future. Recruiting and retaining highly skilled personnel in certain functions continues to be difficult. At certain locations where we operate, the cost of living is extremely high and it may be difficult to retain key employees and management at a reasonable cost. We may not be successful in attracting, assimilating or retaining qualified personnel to fulfill our current or future needs, which could adversely affect our growth and our business.

Our future success depends upon the continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel, as well as our ability to effectively transition to their successors. Most recently, we appointed a new President and Chief Executive Officer in April 2020, at which time our former President and CEO, who had served in such position since 2002, transitioned to the role of special advisor to the Company. This transition may be disruptive to our business, and if we are unable to execute an orderly transition and successfully integrate our new CEO into our management team, our revenue, operating results and financial condition may be adversely affected. In addition, our Chief Financial Officer has announced his retirement from the Company no later than February 28, 2021. Any future changes to our executive and senior management teams, including hires or departures, could cause further disruption to our business and have a negative impact on our operating performance, while these operational areas are in transition. We can provide no assurance that we will be able to find suitable successors to key roles as transitions occur or that any identified successor will be successfully integrated into our management team. Our inability to do so, or to retain other key employees or effectively transition to their successors, or any delay in filling any such positions, could harm our business and our results of operations.

The long sales cycles for many of our products may cause us to incur significant expenses without offsetting net sales.

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 initial 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 order 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 net sales to offset such expenses.

The markets in which we sell our products are intensely competitive and increased competition could cause reduced sales levels, reduced gross margins or the loss of market share.

Competition in the various photonics markets in which we provide products is very intense. We compete against a number of large public and private companies, including IPG Photonics Corporation,

Lumentum Holdings Inc., MKS Instruments, Inc., Novanta Inc., nLIGHT, Inc., II-VI Incorporated, Wuhan Raycus Fiber Laser Technologies Co., Ltd, and Trumpf GmbH, as well as other smaller companies. Some of our competitors are large companies that have significant financial, technical, marketing and other resources. These competitors may be able to devote greater resources than we can to the development, promotion, sale and support of their products. Some of our competitors are much better positioned than we are to acquire other companies in order to gain new technologies or products that may displace our product lines. Any of these acquisitions could give our competitors a strategic advantage. Any business combinations or mergers among our competitors, forming larger companies with greater resources, could result in increased competition, price reductions, reduced margins or loss of market share, any of which could materially and adversely affect our business, results of operations and financial condition.

Additional competitors may enter the markets in which we serve, both foreign and domestic, and we are likely to compete with new companies in the future. For example, in recent years there have been a growing number of companies in China that, in some cases aided by government subsidies, are targeting our markets and are exerting significant price pressure in certain of our product markets, in particular the HPFL products used in the metal cutting market in China, which led to our decision to exit this market. These companies will likely in the future be able to expand into broader product markets, which may result in additional competitive pressures on us. We may also encounter potential customers that, due to existing relationships with our competitors, are committed to the products offered by these competitors. Further, our current or potential customers may determine to develop and produce products for their own use which are competitive to our products. Such vertical integration could reduce the market opportunity for our products. As a result of the foregoing factors, we expect that competitive pressures may result in price reductions, reduced margins, loss of sales and loss of market share. In addition, in markets where there are a limited number of customers, competition is particularly intense.

If we fail to accurately forecast component and material requirements for our products, we could incur additional costs and incur significant delays in shipments, which could result in a loss of customers.

We use rolling forecasts based on anticipated product orders and material requirements planning systems to determine our product requirements. It is very important that we accurately predict both the demand for our products and the lead times required to obtain the necessary components and materials. We depend on our suppliers for most of our product components and materials. Lead times for components and materials that we order vary significantly and depend on factors including the specific supplier requirements, the size of the order, contract terms and current market demand for components. For substantial increases in our sales levels of certain products, some of our suppliers may need at least nine months lead-time. If we overestimate our component and material requirements, we may have excess inventory, which would increase our costs. If we underestimate our component and material requirements, we may have inadequate inventory, which could interrupt and delay delivery of our products to our customers. We expect that the volatility and uncertainty created by the COVID-19 pandemic in the markets we serve will exacerbate these issues, and any of these occurrences would negatively impact our net sales, business or operating results.

Our reliance on contract manufacturing and outsourcing may adversely impact our financial results and operations due to our decreased control over the performance and timing of certain aspects of our manufacturing.

Our manufacturing strategy includes partnering with contract manufacturers to outsource non-core sub-assemblies and less complex turnkey products, including some performed at international sites located in Asia and Eastern Europe. Our ability to resume internal manufacturing operations for certain products and components in a timely manner may be eliminated. The cost, quality, performance and availability of contract manufacturing operations are and will be essential to the successful production and sale of many of our products. Our financial condition or results of operation could be adversely impacted if any contract manufacturer or other supplier is unable for any reason, including as a result of the COVID-19 pandemic and the negative effect it is having on the global economy, to meet our cost, quality, performance, and availability standards. We may not be able to provide contract manufacturers with product volumes that are high enough to achieve sufficient cost savings. If shipments fall below forecasted levels we may incur increased costs or be required to take ownership of the inventory. 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.

If we fail to effectively manage our growth or, alternatively, our spending during downturns, our business could be disrupted, which could harm our operating results.

Growth in sales, combined with the challenges of managing geographically dispersed operations, can place a significant strain on our management systems and resources, and our anticipated growth in future operations could continue to place such a strain. The failure to effectively manage our growth could disrupt our business and harm our operating results. Our ability to successfully offer our products and implement our business plan in evolving markets requires an effective planning and management process. In economic downturns, we must effectively manage our spending and operations to ensure our competitive position during the downturn, as well as our future opportunities when the economy improves, remain intact. The failure to effectively manage our spending and operations could disrupt our business and harm our operating results.

Our market is 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.

The photonics industry is 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 net 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 assure you that our expenditures for research and development will result in the introduction 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.

Our future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers.

Our current products address a broad range of commercial and scientific research applications in the photonics markets. We cannot assure you that the market for these applications will continue to generate significant or consistent demand for our products. Demand for our products could be significantly diminished by disrupting technologies or products that replace them or render them obsolete. Furthermore, the new and enhanced products in certain markets generally continue to be smaller in size and have lower ASPs, and therefore, we have to sell more units to maintain revenue levels. Accordingly, we must continue to invest in research and development in order to develop competitive products. Ongoing restrictions resulting from the COVID-19 pandemic have had a negative impact on the work on some of our research and development programs due to the inability of some personnel being able to work in applicable regional labs.

Our future success depends on our ability to anticipate our customers' needs and develop products that address those needs. Introduction of new products and product enhancements will require that we effectively transfer production processes from research and development to manufacturing and coordinate our efforts with those of our suppliers to achieve volume production rapidly. If we fail to transfer production processes effectively, develop product enhancements or introduce new products in sufficient quantities to meet the needs of our customers as scheduled, our net sales may be reduced and our business may be harmed.

Our and our customers' operations would be seriously harmed if our logistics or facilities or those of our suppliers, our customers' suppliers or our contract manufacturers were to experience catastrophic loss.

Our operations, logistics and facilities and those of our customers, suppliers and contract manufacturers could be subject to a catastrophic loss from fire, flood, earthquake, volcanic eruption, work stoppages, power outages, acts of war, pandemics such as COVID-19, energy shortages, theft of assets, other natural disasters or terrorist activity. A substantial portion of our research and development activities, manufacturing, our

corporate headquarters and other critical business operations are located near major earthquake faults in Santa Clara, California, an area with a history of seismic events. Any such loss or detrimental impact to any of our operations, logistics or facilities could disrupt our operations, delay production, shipments and net sales 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 assure you that our existing insurance coverage will be adequate against all other possible losses.

ACQUISITION RISKS

We may not be able to integrate the business of Rofin or other future acquisitions successfully with our own, realize the anticipated benefits of such acquisitions or manage our expanded operations, any of which would adversely affect our results of operations.

We have devoted, and expect to continue to devote, significant management attention and resources to integrating our business practices with those of Rofin. Such integration efforts are costly due to the large number of processes, policies, procedures, locations, operations, technologies and systems to be integrated, including purchasing, accounting and finance, sales, service, operations, payroll, pricing, marketing and employee benefits. Integration expenses could, particularly in the short term, exceed the savings we expect to achieve from the elimination of duplicative expenses and the realization of economies of scale, which could result in significant charges to earnings that we cannot currently quantify. Potential difficulties that we may encounter as part of the integration process include the following:

- the inability to successfully combine our business with Rofin in a manner that permits the combined company to achieve the full synergies and other benefits anticipated to result from the merger;
- complexities associated with managing the combined businesses, including difficulty addressing possible differences in corporate cultures and management philosophies and the challenge of integrating products, services, complex and different information technology systems (including different Enterprise Management Systems), control and compliance processes, technology, networks and other assets of each of the companies in a cohesive manner;
- diversion of the attention of our management;
- the disruption of, or the loss of momentum in, our business; and
- inconsistencies in standards, controls, procedures or policies.

Any of the foregoing could adversely affect our ability to maintain relationships with customers, suppliers, employees and other constituencies or our ability to achieve the anticipated benefits of the merger, or could reduce our earnings or otherwise adversely affect our business and financial results. For example, in the fourth quarter of fiscal 2018, difficulties in implementing our Enterprise Management Systems at one of our manufacturing sites located in Germany, which was historically part of Rofin, resulted in a shortage of manufacturing parts and shippable inventory to meet demands, resulting in a reduction of revenue for that quarter. If similar difficulties arise in the future and we are unable to resolve them in a timely manner, we may experience a shortage of parts and inventory or otherwise be unable to meet demand, which could have a material adverse impact on our results of operations.

Following the merger, the size and complexity of the business of the combined company has increased significantly. Our future success depends, in part, upon our ability to manage this expanded business, which has and will pose substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. The execution of these consolidation projects could result in temporary loss of productivity or operational efficiency, interruptions in manufacturing or other unforeseen challenges while the projects are ongoing. Moreover, there can be no assurances that we will be successful in realizing the anticipated savings in connection with these consolidations or with our broader efforts to manage our expanded business or that we will realize the expected synergies and benefits anticipated from the merger.

Historically, acquisitions have been an important element of our strategy. However, we may not find suitable acquisition candidates in the future and we may not be able to successfully integrate and manage acquired businesses. Any acquisitions we make could disrupt our business and harm our financial condition.

We have in the past made both large and smaller strategic acquisitions of other corporations and entities, including Ondax in October 2018, OR Laser in March 2018 and Rofin in November 2016, as well as asset purchases, and we continue to evaluate potential strategic acquisitions of complementary companies, products and technologies. In the event of any future acquisitions, we could:

- issue stock that would dilute our current stockholders' percentage ownership;
- pay cash that would decrease our working capital;
- incur debt;
- · assume liabilities; or
- incur expenses related to impairment of goodwill and other long-lived assets, as we incurred in the quarter ending April 4, 2020 totaling \$451.0 million.

Acquisitions also involve numerous risks, including:

- problems combining the acquired operations, systems, technologies or products;
- an inability to realize expected operating efficiencies or product integration benefits;
- difficulties in coordinating and integrating geographically separated personnel, organizations, systems and facilities;
- · difficulties integrating business cultures;
- unanticipated costs or liabilities, including the costs associated with improving the internal controls of the acquired company;
- diversion of management's attention from our core businesses;
- adverse effects on existing business relationships with suppliers and customers;
- potential loss of key employees, particularly those of the purchased organizations;
- incurring unforeseen obligations or liabilities in connection with acquisitions; and
- the failure to complete acquisitions even after signing definitive agreements which, among other things, would result in the expensing of potentially significant professional fees and other charges in the period in which the acquisition or negotiations are terminated.

We cannot assure you that we will be able to successfully identify appropriate acquisition candidates, to integrate any businesses, products, technologies or personnel that we might acquire in the future or achieve the anticipated benefits of such transactions, which may harm our business.

FINANCIAL RISKS

Charges to earnings resulting from the application of the purchase method of accounting to the Rofin acquisition may adversely affect our results of operations.

In accordance with generally accepted accounting principles, we have accounted for the Rofin acquisition using the purchase method of accounting. Under the purchase method of accounting, we allocated the total purchase price of Rofin's net tangible and identifiable intangible assets based upon their estimated fair values at the acquisition date. The excess of the purchase price over net tangible and identifiable intangible assets was recorded as goodwill. We have incurred and will continue to incur additional depreciation and amortization expense over the useful lives of certain of the net tangible and intangible assets acquired in connection with the acquisition. These depreciation, amortization and potential impairment charges could have a material impact on our results of operations. In addition, to the extent the value of goodwill or intangible assets with indefinite lives becomes impaired, we may be required to incur material charges relating to the impairment of those assets. For example, in the quarter ended April 4, 2020, the worldwide

spread of COVID-19 created significant volatility, uncertainty and disruption to the global economy, representing an indicator to test our goodwill for impairment. The former operations of Rofin are largely included in our ILS segment. As a result of that test, we recorded a non-cash pre-tax charge, in the quarter ended April 4, 2020, related to the ILS reporting unit of \$327.2 million, reducing the goodwill balance of the reporting unit to zero. In addition, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment and right-of-use ("ROU") assets as of April 4, 2020 and recorded non-cash pre-tax charges, in the quarter ended April 4, 2020, related to the impairment intangible assets, property, plant and equipment and ROU assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively.

Our indebtedness following the Rofin merger is substantially greater than our indebtedness prior to the merger. This increased level of indebtedness could adversely affect us, including by decreasing our business flexibility, and will increase our borrowing costs.

In November 2016, we entered into a credit agreement (the "Credit Agreement"), which provided for a 670.0 million Euro term loan (the "Euro Term Loan", all of which was drawn, and a \$100.0 million revolving credit facility (the "Revolving Credit Facility"), under which a 10 million Euro letter of credit was issued. As of October 3, 2020, 358.2 million Euros were outstanding under the Euro Term Loan. As of October 3, 2020, the Revolving Credit Facility had been used for guarantees of 10.0 million Euros as well as borrowings of \$10.0 million. We may incur additional indebtedness in the future by accessing the Revolving Credit Facility and/or entering into new financing arrangements. Our ability to pay interest and repay the principal of our current indebtedness is dependent upon our ability to manage our business operations and the ongoing interest rate environment. There can be no assurance that we will be able to manage any of these risks successfully.

The Credit Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements and compliance with applicable laws and regulations, and negative covenants, including covenants limiting the ability of us and our subsidiaries to, among other things, incur debt, grant liens, make investments, make certain restricted payments, transact with affiliates, and sell assets. The Credit Agreement also requires us and our subsidiaries to maintain a senior secured net leverage ratio as of the last day of each fiscal quarter of less of than or equal to 3.50 to 1.00. The Credit Agreement contains customary events of default that include, among other things, payment defaults, cross defaults with certain other indebtedness, violation of covenants, inaccuracy of representations and warranties in any material respect, change in control of us and Coherent Holding BV & Co. K.G. (formerly Coherent Holding GmbH), judgment defaults, and bankruptcy and insolvency events. If an event of default exists, the lenders may require the immediate payment of all obligations and exercise certain other rights and remedies provided for under the Credit Agreement, the other loan documents and applicable law. The acceleration of such obligations is automatic upon the occurrence of a bankruptcy and insolvency event of default. There can be no assurance that we will have sufficient financial resources or we will be able to arrange financing to repay our borrowings at such time.

Our substantially increased indebtedness and higher debt-to-equity ratio as a result of the Rofin merger in comparison to that prior to the merger will have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions and will increase our borrowing costs. In addition, the amount of cash required to service our increased indebtedness levels and thus the demands on our cash resources will be greater than the amount of cash flows required to service our indebtedness or that of Rofin individually prior to the merger. The increased levels of indebtedness could also reduce funds available for our investments in product development as well as capital expenditures, dividends, share repurchases and other activities and may create competitive disadvantages for us relative to other companies with lower debt levels.

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 is 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. For example, in the quarter ended April 4, 2020, the worldwide spread of COVID-19 created significant volatility, uncertainty and disruption to the global economy, representing an indicator to test our goodwill for impairment. As a result of that test, we recorded a non-cash pre-tax charge, in the quarter ended April 4, 2020, related to the ILS reporting unit of \$327.2 million, reducing the goodwill balance of the reporting unit to zero. In addition, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment and ROU assets as of April 4, 2020 and recorded non-cash pre-tax charges, in the quarter ended April 4, 2020, related to the impairment intangible assets, property, plant and equipment and ROU assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively.

Our cash and cash equivalents and short-term investments are managed through various banks around the world and volatility in the capital and credit market conditions could cause financial institutions to fail or materially harm service levels provided by such banks, both of which could have an adverse impact on our ability to timely access funds.

World capital and credit markets have been and may continue to experience volatility and disruption. In some cases, the markets have exerted downward pressure on stock prices and credit capacity for certain issuers, as well as pressured the solvency of some financial institutions. These financial institutions, including banks, have had difficulty timely performing regular services and in some cases have failed or otherwise been largely taken over by governments. We maintain our cash, cash equivalents and short-term investments with a number of financial institutions around the world. Should some or all of these financial institutions fail or otherwise be unable to timely perform requested services, we would likely have limited ability to timely access our cash deposited with such institutions, or, in extreme circumstances the failure of such institutions could cause us to be unable to access cash for the foreseeable future. If we are unable to quickly access our funds when we need them, we may need to increase the use of our existing credit lines or access more expensive credit, if available. If we are unable to access our cash or if we access existing or additional credit or are unable to access additional credit, it could have a negative impact on our operations, including our reported net income. In addition, the willingness of financial institutions to continue to accept our cash deposits will impact our ability to diversify our investment risk among institutions.

We are exposed to credit risk and fluctuations in the market values of our investment portfolio.

Although we have not recognized any material losses on our cash, cash equivalents and short-term investments, future declines in their market values could have a material adverse effect on our financial condition and operating results. Given the global nature of our business, we have investments both domestically and internationally. There has recently been growing pressure on the creditworthiness of sovereign nations, particularly in Europe where a significant portion of our cash, cash equivalents and short-term investments are invested, which results in corresponding pressure on the valuation of the securities issued by such nations. Additionally, our overall investment portfolio is often concentrated in government-issued securities such as U.S. Treasury securities and government agencies, corporate notes, commercial paper and money market funds. Credit ratings and pricing of these investments can be negatively impacted by liquidity, credit deterioration or losses, financial results, or other factors. Additionally, liquidity issues or political actions by sovereign nations could result in decreased values for our investments in certain government securities. As a result, the value or liquidity of our cash, cash equivalents and short-term investments could decline or become materially impaired, which could have a material adverse effect on our financial condition and operating results. See "Item 7A. Quantitative and Qualitative Disclosures about Market Risk."

INTELLECTUAL PROPERTY AND CYBERSECURITY RISKS

If we are unable to protect our proprietary technology, our competitive advantage could be harmed.

Maintenance of intellectual property rights and the protection thereof is important to our business. We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure

to protect our intellectual property rights. Our patent applications may not be approved, any patents that may be issued may not sufficiently protect our intellectual property and any issued patents may be challenged by third parties. Other parties may independently develop similar or competing technology or design around any patents that may be issued to us. We cannot be certain that the steps we have taken will prevent the misappropriation of our intellectual property, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. Further, we may be required to enforce our intellectual property or other proprietary rights through litigation, which, regardless of success, could result in substantial costs and diversion of management's attention. Additionally, there may be existing patents of which we are unaware that could be pertinent to our business and it is not possible for us to know whether there are patent applications pending that our products might infringe upon since these applications are often not publicly available until a patent is issued or published.

We have been and may, in the future, be subject to claims or litigation from third parties, for claims of infringement of their proprietary rights or to determine the scope and validity of our proprietary rights or the proprietary rights of competitors or other rights holders. These claims could result in costly litigation and the diversion of our technical and management personnel. Adverse resolution of litigation may harm our operating results or financial condition.

In recent years, there has been significant litigation in the United States and around the world involving patents and other intellectual property rights. This has been seen in our industry, for example in the concluded patent-related litigation between IMRA America, Inc. ("Imra") and IPG Photonics Corporation and in Imra's concluded patent-related litigation against two of our German subsidiaries. From time to time, like many other technology companies, we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which such third parties believe may cover certain of our products, processes, technologies or information. In the future, we may be a party to litigation to protect our intellectual property or as a result of an alleged infringement of others' intellectual property whether through direct claims or by way of indemnification claims of our customers, as, in some cases, we contractually agree to indemnify our customers against third-party infringement claims relating to our products. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages or invalidation of our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management time and attention. In addition to paying possibly significant monetary damages, any potential intellectual property litigation could also force us to do one or more of the following:

- stop manufacturing, selling or using our products that use the infringed intellectual property;
- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, although such license may not be available on reasonable terms, or at all; or
- redesign the products that use the technology.

If we are forced to take any of these actions or are otherwise a party to lawsuits of this nature, we may incur significant losses and our business may be seriously harmed. We do not have insurance to cover potential claims of this type.

Our information systems are subject to attacks, interruptions and failures.

As part of our day-to-day business, we store our data and certain data about our customers in our global information technology system. While our system is designed with access security, if a third party gains unauthorized access to our data, including any regarding our customers, such a security breach could expose us to a risk of loss of this information, loss of business, litigation and possible liability. Our security measures may be breached as a result of third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive information such as user names, passwords or other information in order to gain access to our customers' data or our data, including our intellectual property and other confidential business information, or our information technology systems. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement

adequate preventative measures. Any unauthorized access could result in a loss of confidence by our customers, damage our reputation, disrupt our business, lead to legal liability and negatively impact our future sales. Additionally, such actions could result in significant costs associated with loss of our intellectual property, impairment of our ability to conduct our operations, rebuilding our network and systems, prosecuting and defending litigation, responding to regulatory inquiries or actions, paying damages or taking other remedial steps.

Difficulties with our enterprise resource planning ("ERP") system and other parts of our global information technology system could harm our business and results of operation. If our network security measures are breached and unauthorized access is obtained to a customer's data or our data or our information technology systems, we may incur significant legal and financial exposure and liabilities.

Like many modern multinational corporations, we maintain a global information technology system, including software products licensed from third parties. Any system, network or Internet failures, misuse by system users, the hacking into or disruption caused by the unauthorized access by third parties or loss of license rights could disrupt our ability to timely and accurately manufacture and ship products or to report our financial information in compliance with the timelines mandated by the SEC. Any such failure, misuse, hacking, disruptions or loss would likely cause a diversion of management's attention from the underlying business and could harm our operations. In addition, a significant failure of our global information technology system could adversely affect our ability to complete an evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

LEGAL, TAX, REGULATORY AND COMPLIANCE RISKS

Changes in tax rates, tax liabilities or tax accounting rules could affect future results.

As a global company, we are subject to taxation in the United States and various other countries and jurisdictions. Significant judgment is required to determine our worldwide tax liabilities. A number of factors may affect our future effective tax rates including, but not limited to:

- interpretation and impact of the recently enacted and aforementioned U.S. tax laws, the Tax Act and the CARES Act;
- changes in our current and future global structure based on the Rofin acquisition and restructuring that involved significant movement of U.S. and foreign entities and our ability to maintain favorable tax treatment as a result of various Rofin restructuring efforts and business activities;
- the outcome of discussions with various tax authorities regarding intercompany transfer pricing arrangements;
- changes that involve other acquisitions, restructuring or an increased investment in technology outside of the United States to better align asset ownership and business functions with revenues and profits;
- changes in the composition of earnings in countries or states with differing tax rates;
- the resolution of issues arising from tax audits with various tax authorities, and in particular, the outcome of the German tax audits for fiscal 2011-2016 and the appeals of the South Korean fiscal 2014-2017 tax audits through the Competent Authority process between South Korea, Germany and the United States:
- adjustments to estimated taxes upon finalization of various tax returns;
- increases in expenses not deductible for tax purposes, including impairments of goodwill in connection with acquisitions;
- our ability to meet the eligibility requirements for tax holidays of limited time tax-advantage status and any challenges by tax authorities regarding the timing of benefits derived from those holidays;
- · changes in available tax credits;
- changes in share-based compensation;

- changes in other tax laws or the interpretation of such tax laws, including the Base Erosion Profit Shifting action plan implemented by the Organization for Economic Co-operation and Development;
- changes in generally accepted accounting principles; and
- significant fluctuations in business activities due to the COVID-19 pandemic.

As indicated above, we are engaged in discussions with various tax authorities regarding the appropriate level of profitability for Coherent entities and this may result in changes to our worldwide tax liabilities. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service ("IRS") and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different from the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition.

From time to time the United States, foreign and state governments make substantive changes to tax rules and the application of rules to companies. For example, the Tax Act has a significant impact on the taxation of Coherent including the U.S. tax treatment of our foreign operations. The Tax Act is subject to further interpretation by the U.S. federal and state governments and regulatory organizations, legislative updates or new regulations, or changes in accounting standards for income taxes. These actions may have a material impact on our financial results.

Governmental regulations, including tariffs and duties, affecting the import or export of products could negatively affect our business, financial condition and results of operations.

The U.S., Germany, the European Union, the United Kingdom, China, South Korea, Japan and many other foreign governments impose tariffs and duties on the import and export of products, including some of those which we sell. In particular, given our worldwide operations, we pay duties on certain products when they are imported into the United States for repair work as well as on certain of our products which are manufactured by our foreign subsidiaries. These products can be subject to a duty on the product value.

Additionally, the U.S. and various foreign governments have imposed tariffs, controls, export license requirements and restrictions on the import or export of some technologies, especially those related to the power and performance of our products and encryption technology. From time to time, government agencies have proposed additional regulation of encryption technology, such as requiring the escrow and governmental recovery of private encryption keys. Governmental regulation of encryption technology and regulation of imports or exports, or our failure to obtain required import or export licenses or other approvals for our products, could harm our international and domestic sales and adversely affect our net sales.

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 EAR, 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 ITAR require a license. Certain of our products are subject to EAR and to ITAR. Products and the associated technical data 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 and may result in substantial expenses and diversion of management's attention. Failure (i) to obtain the required export licenses could reduce our revenue and/or (ii) to adequately address these directives could result in substantial payments, fines, penalties or damages — including the suspension or loss of our export privileges, any of which could have a material adverse effect on our business or financial position, results of operations, or cash flows. For example, German authorities are currently investigating an export compliance matter involving one of our German subsidiaries involving four former employees (whose employment was terminated following our discovery of this matter) and while we do not believe that the final resolution of this matter will be material to our consolidated financial position, results of operations or cash flows, the German government investigation is ongoing and it is possible that substantial payments, fines, penalties or damages could result.

The U.S. has recently instituted or proposed changes in trade policies that include the negotiation or termination of trade agreements, the imposition of higher tariffs on imports into the United States including, in particular, on Chinese goods, economic sanctions on individuals, corporations or countries and other government regulations affecting trade between the United States and other countries where we conduct our business. In addition, the Japanese government has recently instituted trade restrictions affecting the export to South Korea of certain products and materials used in the manufacture of flat panel displays and in the semiconductor industry. These policy changes and proposals could require time-consuming and expensive alterations to our business operations and may result in greater restrictions and economic disincentives on international trade, which could negatively impact our competitiveness in jurisdictions around the world as well as lead to an increase in costs in our supply chain. Given that we are a multinational corporation, with manufacturing located both in the United States and internationally, we may face additional susceptibility to negative impacts from these tariffs or change in trade policies regarding our intercompany trade practices. For example, we have recently seen a reduction in demand from our Chinese customers particularly in the materials processing space. Some of these customers are reevaluating expansion plans and delaying and, in limited cases, cancelling orders. In addition, new tariffs and other changes in U.S. trade policy could trigger retaliatory actions by affected countries, and certain foreign governments, including the Chinese government (which has imposed retaliatory tariffs on a range of U.S. goods including certain photonics products), some of which have instituted or are considering imposing trade sanctions on certain U.S. manufactured goods. Such changes by the United States and other countries have the potential to adversely impact U.S. and worldwide economic conditions, our industry and the global demand for our products, and as a result, could negatively affect our business, financial condition and results of operations.

As a multinational corporation, we may be subject to audits by tax, export and customs authorities, as well as other government agencies. For example, we were audited in South Korea for customs duties and value added tax for the period from March 2009 to March 2014. We were liable for additional payments, duties, taxes and penalties of \$1.6 million, which we paid in the second quarter of fiscal 2016. Any future audits could lead to assessments that could have a material adverse effect on our business or financial position, results of operations, or cash flows.

We use standard laboratory and manufacturing materials that could be considered hazardous and we could be liable for any damage or liability resulting from accidental environmental contamination or injury.

Although most of our products do not incorporate hazardous or toxic materials and chemicals, some of the gases used in our excimer lasers and some of the liquid dyes used in some of our scientific laser products are highly toxic. In addition, our operations involve the use of standard laboratory and manufacturing materials that could be considered hazardous. Also, if a facility fire were to occur at our Sunnyvale, California site and were to spread to a reactor used to grow semiconductor wafers, it could release highly toxic emissions. We believe that our safety procedures for handling and disposing of such materials comply with all federal, state and offshore regulations and standards. However, the risk of accidental environmental contamination or injury from such materials cannot be entirely eliminated. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business which could have an adverse effect on our financial results or our business as a whole.

Compliance or the failure to comply with current and future environmental regulations could cause us significant expense.

We are subject to a variety of federal, state, local and foreign environmental regulations relating to the use, storage, discharge and disposal of hazardous chemicals used during our manufacturing process or requiring design changes or recycling of products we manufacture. If we fail to comply with any present and future regulations, we could be subject to future liabilities, the suspension of production or a prohibition on the sale of products we manufacture. In addition, such regulations could restrict our ability to expand our facilities or could require us to acquire costly equipment, or to incur other significant expenses to comply with environmental regulations, including expenses associated with the recall of any non-compliant product and the management of historical waste.

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. These regulations include, for example, the Registration, Evaluation, Authorization and Restriction of Chemical substances ("REACH"), the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive ("RoHS") and the Waste Electrical and Electronic Equipment Directive ("WEEE") enacted in the European Union, which regulate the use of certain hazardous substances in, and require the collection, reuse and recycling of waste from, certain products we manufacture. This and similar legislation that has been or is in the process of being enacted in Japan. China, South Korea and various states of the United States may require us to re-design our products to ensure compliance with the applicable standards, for example by requiring the use of different types of materials. These redesigns or alternative materials may detrimentally impact the performance of our products, add greater testing lead-times for product introductions or have other similar effects. We believe we comply with all such legislation where our products are sold, and we will continue to monitor these laws and the regulations being adopted under them to determine our responsibilities. In addition, we are monitoring legislation relating to the reduction of carbon emissions from industrial operations to determine whether we may be required to incur any additional material costs or expenses associated with our operations. We are not currently aware of any such material costs or expenses. The SEC has promulgated rules requiring disclosure regarding the use of certain "conflict minerals" mined from the Democratic Republic of Congo and adjoining countries and procedures regarding a manufacturer's efforts to prevent the sourcing of such minerals. The implementation of such rules has required us to incur additional expense and internal resources and may continue to do so in the future, particularly in the event that only a limited pool of suppliers are available to certify that products are free from "conflict minerals." Our failure to comply with any of the foregoing regulatory requirements or contractual obligations could result in our being directly or indirectly liable for costs, fines or penalties and third-party claims, and could jeopardize our ability to conduct business in the United States and foreign countries.

Failure to maintain effective internal controls may cause a loss of investor confidence in the reliability of our financial statements or cause us to delay filing our periodic reports with the SEC and adversely affect our stock price.

The SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring public companies to include a report of management on internal control over financial reporting in their annual reports on Form 10-K that contain an assessment by management of the effectiveness of our internal control over financial reporting. In addition, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Although we test our internal control over financial reporting in order to ensure compliance with the Section 404 requirements, our failure to maintain adequate internal controls over financial reporting could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements or a delay in our ability to timely file our periodic reports with the SEC, which ultimately could negatively impact our stock price.

We may face particular privacy, data 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, data security and data protection risks due to laws and regulations regulating the protection or security of personal and other sensitive data, including in particular several laws and regulations that have recently been enacted or adopted or are likely to be enacted or adopted in the future. For instance, effective May 25, 2018, the European General Data Protection Regulation ("GDPR") imposed additional obligations and risk upon our business and increased substantially the penalties to which we could be subject in the event of any non-compliance. GDPR requires companies to satisfy requirements regarding the handling of personal data (generally, of EU residents), including its use, protection and the rights of affected persons regarding their data. Failure to comply with GDPR requirements could result in fines of up to 20 million Euro or 4% of global annual revenues, whichever is higher. We have taken extensive measures to ensure compliance with GDPR and to minimize the risk of incurring any penalties and we continue to adapt to the developing interpretation and enforcement of GDPR as well as emerging best practice standards. For example, we have introduced an international Data Protection Organization, a European Data Protection Policy, a system for Data Protection Management and Documentation and implemented an international Intra Group Data Transfer Agreement including the EU Standard Contractual Clauses. In addition, several other jurisdictions around the world have recently enacted privacy laws or

regulations similar to GDPR. For instance, California enacted the California Consumer Privacy Act ("CCPA"), which became effective January 1, 2020 and which gives consumers many of the same rights as those available under GDPR. Several laws similar to the CCPA have been proposed in the United States at both the federal and state level. Like GDPR, other similar 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.

Violations of anti-bribery, anti-corruption, and/or international trade laws to which we are subject could negatively affect our business, financial condition and results of operations.

We are subject to laws concerning our business operations and marketing activities in foreign countries where we conduct business. For example, we are subject to the FCPA, U.S. export control and trade sanction laws, and similar anti-corruption and international trade laws in certain foreign countries, such as the U.K. Bribery Act. The FCPA generally prohibits U.S. companies and their officers, directors, employees, and intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business abroad or otherwise obtaining favorable treatment. The FCPA also requires that U.S. public companies maintain books and records that fairly and accurately reflect transactions and maintain an adequate system of internal accounting controls. There can be no assurance that our employees, contractors, sales channel partners and agents will not take actions in violation of our policies and procedures, which are designed to ensure compliance with such laws. Violations of such laws and/or our policies and procedures by our employees, contractors, sales channel partners and agents could result in sanctions including civil and criminal fines, disgorgement of profits and suspension or debarment of our ability to contract with government agencies or receive export licenses and could also result in the termination of our relationships with customers and suppliers as well as financial reporting problem which could negatively affect our business, financial condition and results of operations.

RISKS RELATED TO OWNERSHIP OF OUR COMMON STOCK

Provisions of our charter documents and Delaware law, and our Change of Control and Leadership Change Severance Plan, may have anti-takeover effects that could prevent or delay a change in control.

Provisions of our certificate of incorporation and bylaws, as well as the terms of our Change of Control and Leadership Change Severance Plan, may discourage, delay or prevent a merger or acquisition, make a merger or acquisition more costly for a potential acquirer, or make removal of incumbent directors or officers more difficult. These provisions may discourage takeover attempts and bids for our common stock at a premium over the market price. These provisions include:

- the ability of our Board of Directors to alter our bylaws without stockholder approval;
- limiting the ability of stockholders to call special meetings; and
- establishing advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly-held Delaware corporation from engaging in a merger, asset or stock sale or other transaction with an interested stockholder for a period of three years following the date such person became an interested stockholder, unless prior approval of our board of directors is obtained or as otherwise provided. These provisions of Delaware law also may discourage, delay or prevent someone from acquiring or merging with us without obtaining the prior approval of our board of directors, which may cause the market price of our common stock to decline. In addition, we have adopted a change of control severance plan, which provides for the payment of a cash severance benefit to each eligible employee based on the employee's position. If a change of control occurs, our successor or acquirer will be required to assume and agree to perform all of our obligations under the change of control severance plan which may discourage potential acquirers or result in a lower stock price.

GENERAL RISK FACTORS

Worldwide economic conditions and related uncertainties could negatively impact demand for our products and results of operations.

Volatility and disruption in the capital and credit markets, depressed consumer confidence, government economic policies, negative economic conditions, volatile corporate profits and reduced capital spending could negatively impact demand for our products. In particular, it is difficult to develop and implement strategy, sustainable business models and efficient operations, as well as effectively manage supply chain relationships, in the face of such conditions, including uncertainty regarding the ability of some of our suppliers to continue operations and provide us with uninterrupted supply flow. Our ability to maintain our research and development investments in our broad product offerings may be adversely impacted in the event that our future sales decline or remain flat. Spending and the timing thereof by consumers and businesses have a significant impact on our results and, where such spending is delayed or cancelled, it could have a material negative impact on our operating results. Global economic conditions have become more uncertain and challenging as the effects of the COVID-19 pandemic continue to have a significant adverse effect on the global economy. Weakness in our end markets has negatively impacted our bookings, net sales, gross margin and operating expenses, and, if it continues, would have a material adverse effect on our business, financial condition and results of operations.

Uncertainty in global fiscal policy has likely had an adverse impact on global financial markets and overall economic activity in recent years. Should this uncertain financial policy continue to occur or recur, it would likely continue to, and may in the future, negatively impact global economic activity. Any weakness in global economies would also likely have negative repercussions on U.S. and global credit and financial markets, and further exacerbate sovereign debt concerns in the European Union. All of these factors would likely adversely impact the global demand for our products and the performance of our investments, and would likely have a material adverse effect on our business, results of operations and financial condition.

Financial turmoil affecting the banking system and financial markets, as has occurred in recent years, could result in tighter credit markets and lower levels of liquidity in some financial markets. There could be a number of follow-on effects from a tightened credit environment on our business, including the insolvency of key suppliers or their inability to obtain credit to finance development and/or manufacture products resulting in product delays; inability of customers to obtain credit to finance purchases of our products and/or customer insolvencies; and failure of financial institutions negatively impacting our treasury functions. In the event our customers are unable to obtain credit or otherwise pay for our shipped products it could significantly impact our ability to collect on our outstanding accounts receivable. Other income and expense also could vary materially from expectations depending on gains or losses realized on the sale or exchange of financial instruments; impairment charges resulting from revaluations of debt and equity securities and other investments; interest rates; cash balances; and changes in fair value of derivative instruments. Volatility in the financial markets and any overall economic uncertainty increase the risk that the actual amounts realized in the future on our financial instruments could differ significantly from the fair values currently assigned to them. Uncertainty about global economic conditions could also continue to increase the volatility of our stock price.

In addition, political and social turmoil related to international conflicts, terrorist acts, civil unrest and mass migration may put further pressure on economic conditions in the United States and the rest of the world. Unstable economic, political and social conditions make it difficult for our customers, our suppliers and us to accurately forecast and plan future business activities. If such conditions persist, our business, financial condition and results of operations could suffer. Additionally, unstable economic conditions can provide significant pressures and burdens on individuals, which could cause them to engage in inappropriate business conduct. See "Part II, Item 9A. Controls and Procedures."

We are exposed to lawsuits in the normal course of business which could have a material adverse effect on our business, operating results, or financial condition.

We are exposed to lawsuits in the normal course of our business, including product liability claims, if personal injury, death or commercial losses occur from the use of our products. As a public company our stock price fluctuates for a variety of different reasons, some of which may be related to broader industry

and/or market factors. As a result, from time-to-time we may be subject to the risk of litigation due to the fluctuation in stock price or other governance or market-related factors. While we typically maintain business insurance, including directors' and officers' policies, litigation can be expensive, lengthy, and disruptive to normal business operations, including the potential impact of indemnification obligations for individuals named in any such lawsuits. We may not, however, be able to secure insurance coverage on terms acceptable to us in the future. Moreover, the results of complex legal proceedings are difficult to predict. An unfavorable resolution of a particular lawsuit, including a recall or redesign of products if ultimately determined to be defective, could have a material adverse effect on our business, operating results, or financial condition.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Santa Clara, California. At fiscal 2020 year-end, our principal manufacturing locations were as follows (all acreage and square footage is approximate) (unless otherwise indicated, each property is utilized jointly by our two segments):

	Description	Use	Term*
Santa Clara, CA	8.5 acres of land, 200,000 square feet	Corporate headquarters, manufacturing, R&D	Owned
Richmond, CA ⁽²⁾	several buildings totaling 68,635 square feet	Office, manufacturing, R&D	Leased through November 2022
Sunnyvale, CA ⁽¹⁾	two buildings totaling 28,299 square feet	Office, manufacturing, R&D	Leased through December 2023
Bloomfield, CT ⁽¹⁾	88,396 square feet	Office, manufacturing, R&D	Leased through February 2027
East Granby, CT ⁽¹⁾	68,135 square feet	Office, manufacturing, R&D	Leased through January 2027
Plymouth, MI ⁽¹⁾	54,080 square feet	Office, manufacturing, R&D	Leased through May 2022
Mount Olive, NJ ⁽²⁾	88,000 square feet	Office, manufacturing, R&D	Leased through June 2028
Tampere, Finland (1)	4.9 acres of land, 50,074 square feet	Office, manufacturing, R&D	Owned
Gilching, Germany ⁽¹⁾	4.2 acres of land, 125,012 square feet	Office, manufacturing, R&D	Owned
Göttingen, Germany ⁽²⁾	14.2 acres of land, several buildings totaling 211,648 square feet	Office, manufacturing, R&D	Owned
Lübeck, Germany ⁽²⁾	several buildings totaling 89,761 square feet	Office, manufacturing, R&D	Leased through March 2022
Lübeck, Germany ⁽²⁾	7.4 acres of land	Future office, manufacturing, R&D	Owned (construction of new building in process)
Mainz, Germany ⁽¹⁾	1.2 acres of land, 46,984 square feet	Office, manufacturing, R&D	Owned
Mainz, Germany ⁽¹⁾	several buildings totaling 46,193 square feet	Office, manufacturing, R&D	Leased primarily through September 2022
Glasgow, Scotland ⁽²⁾	2.0 acres of land, 68,220 square feet	Office, manufacturing, R&D	Owned
Kallang Sector, Singapore	42,722 square feet	Office, manufacturing	Leased through January 2022
An-Seong, South Korea ⁽²⁾	60,257 square feet	Office, manufacturing	Leased through October 2027

⁽¹⁾ This facility is utilized primarily by our ILS operating segment.

- (2) This facility is utilized primarily by our OLS operating segment.
- * We currently plan to renew leases on buildings as they expire, as necessary.

We maintain other manufacturing, sales and service offices under varying leases expiring from fiscal 2021 through 2032 in Belgium, Canada, China, France, Germany, Israel, Italy, Japan, Malaysia, the Netherlands, South Korea, Spain, Sweden, Switzerland, Taiwan, the United Kingdom, the United States and Vietnam.

We consider our facilities to be both suitable and adequate to provide for current and near term requirements and that the productive capacity in our facilities is substantially being utilized or we have plans to utilize it.

ITEM 3. LEGAL PROCEEDINGS

We are subject to legal claims and litigation arising in the ordinary course of business, such as contract-related, product sales and servicing, real estate, product liability, regulatory matters, employment or intellectual property claims.

Although we do not expect that such claims and litigation will ultimately have a material adverse effect on our consolidated financial position, results of operations or cash flows, an adverse result in one or more matters could negatively affect our results in the period in which they occur, or in future periods.

The United States and many foreign governments impose tariffs and duties on the import and export of certain products we sell and purchase. From time to time our customs compliance, product classifications, duty calculations and payments are reviewed or audited by government agencies. Any adverse result in such a review or audit could negatively affect our results in the period in which they occur, or in future periods.

German authorities are currently investigating an export compliance matter involving one of our German subsidiaries involving four former employees (whose employment was terminated following our discovery of this matter). While under German law the subsidiary can be held liable for certain infringements by its employees of German export control laws, we believe that this matter involves less than approximately 1.5 million Euros in transactions in the period currently under investigation and do not believe that the final resolution of this matter will be material to our consolidated financial position, results of operations or cash flows. However, the German government investigation is ongoing and it is possible that substantial payments, fines, penalties or damages could result. Even though we do not currently expect this matter to be material to our consolidated financial position, results of operations or cash flows, circumstances could change as the investigation progresses.

Income Tax Audits

We are subject to taxation and file income tax returns in the U.S. federal jurisdiction and in many state and foreign jurisdictions. Our most significant tax jurisdictions are the U.S. and Germany. For U.S. federal and German income tax purposes, all years prior to fiscal 2017 and 2011, respectively, are closed to examination. In our other major foreign jurisdictions and our major state jurisdictions, the years prior to fiscal 2014 and 2016, respectively, are closed. Earlier years in our various jurisdictions may remain open for adjustment to the extent that we have tax attribute carryforwards from those years.

In Germany, various Coherent and legacy Rofin entities are under audit for the years 2011 through 2016. The South Korean tax authorities also performed an audit focused on intercompany transfer pricing arrangements for fiscal years 2014 through 2017. In May 2019, the South Korean tax authorities issued transfer pricing assessments for taxes, royalties and sales commissions, which we are in the process of appealing and contesting through the Competent Authority process between South Korea, Germany and the United States. Accordingly, there is no change to our tax position at the time of filing of this annual report. We are continuing to monitor and evaluate this situation. In October 2020, the South Korean tax authorities advised us that they are performing an internal review of our initial and second High-Tech tax exemptions approved in fiscal 2013 and 2016, respectively. The tax authorities requested information to further substantiate the timing of the benefits of our exemptions and this review is currently ongoing.

The timing and the resolution of income tax examinations is highly uncertain, and the amounts ultimately paid, if any, upon resolution of the issues raised by the taxing authorities may differ materially from the amounts accrued for each year. Management believes that it has adequately provided for any adjustments that may result from tax examinations. We regularly engage in discussions and negotiations with tax authorities regarding tax matters in various jurisdictions. Although the timing of resolution, settlement and closure of audits is not certain, we do not believe it is reasonably possible that our unrecognized tax benefits will materially change in the next 12 months.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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

Our common stock is listed on the NASDAQ Global Select Market exchange with the ticker symbol of COHR.

The number of stockholders of record as of November 25, 2020 was 481. While we paid a cash dividend in fiscal 2013 and may elect to pay dividends in the future, we have no present intention to declare cash dividends. The credit agreement includes certain restrictions on our ability to pay cash dividends.

There were no sales of unregistered securities in fiscal 2020.

On February 5, 2020, we announced that our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock through January 31, 2021. There were no stock repurchases during the fourth quarter of fiscal 2020. As of October 3, 2020, \$100.0 million remained available for repurchase under this program.

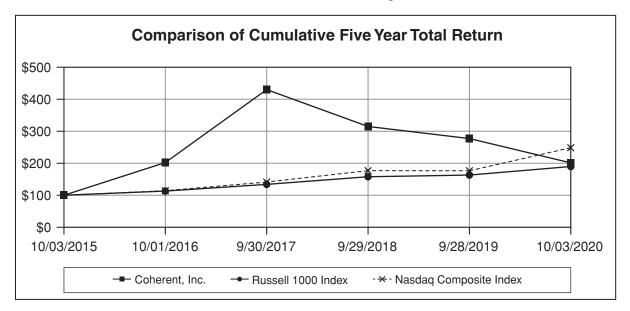
Refer to Note 14 "Stock Repurchases" of our Notes to Consolidated Financial Statements under Item 8 of this annual report for discussion on repurchases during fiscal 2020, 2019 and 2018.

COMPANY STOCK PRICE PERFORMANCE

The following graph shows a five-year comparison of cumulative total stockholder return, calculated on a dividend reinvestment basis and based on a \$100 investment, from October 3, 2015 through October 3, 2020 comparing the return on our common stock with the Russell 1000 Index and the Nasdaq Composite Index. The stock price performance shown on the following graph is not necessarily indicative of future price performance.

COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN AMONG COHERENT, INC.,

THE RUSSELL 1000 INDEX AND THE NASDAQ COMPOSITE INDEX.



INDEXED RETURNS

	Base Period	Years Ending				
Company Name / Index	10/3/2015	10/1/2016	9/30/2017	9/29/2018	9/28/2019	10/3/2020
Coherent, Inc.	100	202.16	430.08	314.90	277.14	201.17
Russell 1000 Index	100	113.04	134.00	157.81	163.06	189.77
Nasdaq Composite Index	100	114.24	141.30	176.86	176.46	248.56

The information contained above under the caption "Company Stock Price Performance" shall not be deemed to be "soliciting material" or to be "filed" with the SEC, nor will such information be incorporated by reference into any future SEC filing except to the extent that we specifically incorporate it by reference into such filing.

ITEM 6. SELECTED FINANCIAL DATA

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Consolidated Financial Statements and Notes to Consolidated Financial Statements included elsewhere in this annual report.

We derived the consolidated statement of operations data for fiscal 2020, 2019, and 2018 and the consolidated balance sheet data as of fiscal 2020 and 2019 year-end from our audited consolidated financial statements, and accompanying notes, contained in this annual report. The consolidated statements of operations data for fiscal 2017 and 2016 and the consolidated balance sheet data as of fiscal 2018, 2017, and 2016 year-end are derived from our audited consolidated financial statements which are not included in this annual report.

Consolidated financial data		Fiscal 2020 ⁽¹⁾		Fiscal 2019 ⁽²⁾		Fiscal 2018 ⁽³⁾		Fiscal 2017 ⁽⁴⁾		Fiscal 2016 ⁽⁵⁾
			(in thousands, except per share data)							
Net sales	\$1	,228,999	\$1	,430,640	\$1	,902,573	\$	1,723,311	\$	857,385
Gross profit	\$	410,874	\$	486,465	\$	830,691	\$	750,269	\$	381,392
Net income (loss) from continuing operations	\$	(414,139)	\$	53,825	\$	247,360	\$	208,644	\$	87,502
Net income (loss) per share from continuing operations:										
Basic	\$	(17.18)	\$	2.23	\$	10.07	\$	8.52	\$	3.62
Diluted	\$	(17.18)	\$	2.22	\$	9.95	\$	8.42	\$	3.58
Shares used in computation:										
Basic		24,105		24,118		24,572		24,487		24,142
Diluted		24,105		24,279		24,851		24,777		24,415
Total assets*	\$1	,827,496	\$2	2,083,169	\$2	2,259,969	\$2	2,337,800	\$1	,161,148
Long-term obligations	\$	411,140	\$	392,238	\$	420,711	\$	589,001	\$	_
Other long-term liabilities*	\$	221,074	\$	165,881	\$	151,956	\$	166,390	\$	48,826
Stockholders' equity	\$	927,224	\$1	,284,736	\$1	,314,464	\$	1,163,264	\$	910,828

^{*} In February 2016, the FASB issued accounting guidance (ASC 842) that modifies lease accounting for lessees to increase transparency and comparability by recording lease assets and liabilities for operating leases and disclosing key information about leasing arrangements. We adopted ASC 842 in the first quarter of fiscal 2020 utilizing the optional transition method by applying the new standard to leases existing at the date of initial application and not restating comparative periods. The adoption of the standard resulted in the recognition of operating lease assets of \$90.4 million, with corresponding operating lease liabilities of \$93.5 million on our consolidated balance sheet, primarily related to real estate leases.

- (1) Includes \$423.2 million of after-tax charges for goodwill and other impairment (goodwill and other long-lived assets), \$2.1 million of after-tax restructuring charges (net of the gain on the sale-leaseback of our Hamburg facility), \$0.7 million after-tax of accelerated compensation for our former CEO, \$0.6 million non-recurring income tax net expense and \$0.9 million of excess tax benefits for employee stock-based compensation.
- (2) Includes \$16.0 million of after-tax restructuring charges, \$0.4 million of after-tax amortization of purchase accounting step-up, \$1.1 million of benefit from amounts received on a resolved asset recovery matter, \$1.7 million non-recurring income tax net expense and \$2.5 million of excess tax benefits for employee stock-based compensation.
- (3) Includes \$2.9 million of after-tax restructuring charges, \$0.8 million impairment and other charges, \$0.7 million of after-tax acquisition costs, \$0.6 million of after-tax amortization of purchase accounting step-up, \$26.7 million of tax charges due to the U.S. Tax Cuts and Jobs Act transition tax and deferred tax remeasurement, \$3.3 million tax charge due to an increase in valuation allowances against deferred tax assets and \$12.8 million of tax benefit from the adoption of new rules for accounting for excess tax benefits and tax deficiencies for employee stock-based compensation.
- (4) Includes \$19.0 million of after-tax amortization of purchase accounting step-up, \$17.4 million of after tax costs related to the acquisition of Rofin, \$8.4 million of after-tax restructuring charges, an after-tax charge of \$1.9 million for the impairment of net assets of several entities held for sale, \$1.8 million after-tax interest expense on the commitment of the Euro Term Loan to finance the acquisition of Rofin, a \$7.1 million after-tax gain on our hedge of our foreign exchange risk related to the commitment of the Euro Term Loan and the issuance of debt to finance the acquisition of Rofin, a \$3.4 million after-tax gain on our sale of previously owned Rofin shares and a benefit of \$1.4 million from the closure of R&D tax audits.
- (5) Includes \$6.4 million of after tax costs related to the acquisition of Rofin, a \$1.4 million after-tax loss on our hedge of our foreign exchange risk related to the commitment of the Euro Term Loan to finance the acquisition of Rofin, \$0.8 million after-tax interest expense on the commitment of the Euro Term Loan to finance the acquisition of Rofin and a benefit of \$1.2 million from the renewal of the R&D tax credit for fiscal 2015.

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

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. This discussion contains forward-looking statements, which involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors, including but not limited to those discussed in Item 1A,"Risk Factors" and elsewhere in this annual report. Please see the discussion of forward-looking statements at the beginning of this annual report under "Special Note Regarding Forward-Looking Statements."

We have applied the FAST Act Modernization and Simplification of Regulation S-K, which limits the discussion to the two most recent fiscal years. This discussion and analysis deals with comparisons of material changes in the consolidated financial statements for fiscal 2020 and fiscal 2019. For the comparison of fiscal 2019 and fiscal 2018, see the Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our 2019 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on November 26, 2019.

KEY PERFORMANCE INDICATORS

Below is a summary of some of the quantitative performance indicators (as defined below) that are evaluated by management to assess our financial performance. Some of the indicators are non-GAAP measures and should not be considered as an alternative to any other measure for determining operating performance or liquidity that is calculated in accordance with generally accepted accounting principles.

	Fisca	ıl
	2020	2019
Net Sales – OEM Laser Sources	\$ 758,929	\$886,676
Net Sales – Industrial Lasers & Systems	\$ 470,070	\$543,964
Gross Profit as a Percentage of Net Sales – OEM Laser Sources	46.0%	47.3%
Gross Profit as a Percentage of Net Sales – Industrial Lasers & Systems	14.5%	13.3%
Research and Development Expenses as a Percentage of Net Sales	9.4%	8.2%
Income (Loss) Before Income Taxes	\$(442,723)	\$ 60,048
Net Cash Provided by Operating Activities	\$ 206,907	\$181,401
Free Cash Flow	\$ 141,988	\$ 98,118
Days Sales Outstanding in Receivables	65	67
Annualized Fourth Quarter Inventory Turns	1.9	2.1
Net Income (Loss) from Continuing Operations as a Percentage of Net Sales	(33.7)%	3.8%
Adjusted EBITDA as a Percentage of Net Sales	12.3%	18.1%

Definitions and analysis of these performance indicators are as follows:

Net Sales

Net sales include sales of lasers, laser systems, related accessories and services. Net sales for fiscal 2020 decreased 14.4% in our OLS segment and decreased 13.6% in our ILS segment from fiscal 2019. For a description of the reasons for changes in net sales refer to the "Results of Operations" section below.

Gross Profit as a Percentage of Net Sales

Gross profit as a percentage of net sales ("gross profit percentage") is calculated as gross profit for the period divided by net sales for the period. Gross profit percentage for OLS decreased to 46.0% in fiscal 2020 from 47.3% in fiscal 2019. Gross profit percentage for ILS increased to 14.5% in fiscal 2020 from 13.3% in fiscal 2019. For a description of the reasons for changes in gross profit refer to the "Results of Operations" section below.

Research and Development as a Percentage of Net Sales

Research and development as a percentage of net sales ("R&D percentage") is calculated as research and development expense for the period divided by net sales for the period. Management considers R&D percentage to be an important indicator in managing our business as investing in new technologies is a key to future growth. R&D percentage increased to 9.4% in fiscal 2020 from 8.2% in fiscal 2019. For a description of the reasons for changes in R&D spending refer to the "Results of Operations" section below.

Net Cash Provided by Operating Activities

Net cash provided by operating activities shown on our Consolidated Statements of Cash Flows primarily represents the excess of cash collected from billings to our customers and other receipts over cash paid to our vendors for expenses and inventory purchases to run our business. We believe that cash flows from operations is an important performance indicator because cash generation over the long term is essential to maintaining a healthy business and providing funds to help fuel growth. For a description of the reasons for changes in Net Cash Provided by Operating Activities refer to the "Liquidity and Capital Resources" section below.

Free Cash Flow

Free cash flow represents net cash provided by operating activities reduced by purchases of property and equipment, both as reflected on our Consolidated Statements of Cash Flows. We believe that free cash flow is an important performance indicator because it is a measure of cash generation after accounting for

cash outflows to support operations and our investment in capital assets. Cash generation over the long term is essential to maintaining a healthy business and providing funds to help fuel growth. For a description of the reasons for changes in free cash flow refer to the "Liquidity and Capital Resources" section below, where we discuss the reasons for changes in net cash provided by operating and investing activities.

Days Sales Outstanding in Receivables

We calculate days sales outstanding ("DSO") in receivables as net receivables at the end of the period divided by net sales during the period and then multiplied by the number of days in the period, using a 360 day year. DSO in receivables indicates how well we are managing our collection of receivables, with lower DSO in receivables resulting in higher working capital availability. The more money we have tied up in receivables, the less money we have available for research and development, acquisitions, expansion, marketing and other activities to grow our business. Our DSO in receivables for fiscal 2020 decreased to 65 days as compared to 67 days in fiscal 2019. The decrease was primarily due to improved collections of receivables for ELA tools used in the Asian flat panel display market, improved linearity with a lower concentration of sales in the last month of the quarter. These ELA tools are our highest priced products, so any changes in collection timing will have a more significant impact on overall DSO.

Annualized Fourth Quarter Inventory Turns

We calculate annualized fourth quarter inventory turns as cost of sales during the fourth quarter annualized and divided by net inventories at the end of the fourth quarter. This indicates how well we are managing our inventory levels, with higher inventory turns resulting in more working capital availability and a higher return on our investments in inventory. Our annualized fourth quarter inventory turns for fiscal 2020 decreased to 1.9 turns from 2.1 turns in fiscal 2019 due to slower consumption of inventory resulting from a shift in demand partially related to the COVID-19 pandemic and lower intangibles amortization in cost of goods sold as a result of the impairment charges recorded in the second quarter of fiscal 2020. Although our annualized inventory turns are lower than our historical turns primarily due to shifts in demand, we continue to carefully manage our inventory levels in anticipation of expected increased demand from our customers over the next 12 to 18 months.

Adjusted EBITDA as a Percentage of Net Sales

We define adjusted EBITDA as operating income adjusted for depreciation, amortization, stock compensation expense, restructuring costs, and certain other non-operating income and expense items, such as costs related to our acquisitions. Key initiatives to reach our goals for EBITDA improvements include utilization of our Asian manufacturing locations, optimizing our supply chain and continued leveraging of our infrastructure.

We utilize a number of different financial measures, both GAAP and non-GAAP, such as free cash flow and adjusted EBITDA as a percentage of net sales, in analyzing and assessing our overall business performance, for making operating decisions and for forecasting and planning future periods. We consider the use of non-GAAP financial measures helpful in assessing our current financial performance and ongoing operations. While we use non-GAAP financial measures as a tool to enhance our understanding of certain aspects of our financial performance, we do not consider these measures to be a substitute for, or superior to, the information provided by GAAP financial measures. We provide free cash flow and adjusted EBITDA as a percentage of sales in order to enhance investors' understanding of our ongoing operations. These measures are used by some investors when assessing our performance.

Below is the reconciliation of our net cash provided by operating activities to our free cash flow:

	Fiscal	
	2020	2019
Net cash provided by operating activities	\$206,907	\$181,401
Less: Purchases of property and equipment	64,919	83,283
Free cash flow	\$141,988	\$ 98,118

Below is the reconciliation of our net income (loss) from continuing operations a percentage of net sales to our adjusted EBITDA as a percentage of net sales:

	Fisca	l
	2020	2019
Net income (loss) from continuing operations as a percentage of net sales	(33.7)%	3.8%
Income tax expense (benefit)	(2.3)%	0.4%
Interest and other income (expense), net	1.5%	1.7%
Depreciation and amortization	6.3%	8.1%
Restructuring charges and other	0.3%	1.6%
Goodwill and other impairment charges (recoveries)	36.6%	(0.1)%
Stock-based compensation	3.6%	2.6%
Adjusted EBITDA as a percentage of net sales	12.3%	18.1%

SIGNIFICANT EVENTS

Coronavirus pandemic (COVID-19)

In December 2019, COVID-19 was reported, and in January 2020, the World Health Organization ("WHO") declared it a Public Health Emergency of International Concern. On February 28, 2020, the WHO raised its assessment of the COVID-19 threat from high to very high at a global level due to the continued increase in the number of cases and affected countries, and on March 11, 2020, the WHO characterized COVID-19 as a pandemic. In an effort to contain COVID-19 or slow its spread, governments around the world have enacted various measures, including orders to close all businesses not deemed "essential," isolate residents in their homes or places of residence, and practice social distancing at and away from work. These actions and the global health crisis caused by COVID-19 will continue to negatively impact global business activity, which will continue to negatively affect our revenue and results of operations. Each of the regions where we generate a majority of our revenue including Asia, Europe and North America have been and will continue to be impacted by COVID-19. The timing and extent of impact related to COVID-19 varies by country and region.

In determining the impact of the COVID-19 pandemic in relation to our net sales, we compare our actual results to our most recently published forecast and the net sales guidance range communicated in our quarterly earnings call. This forecast has been adjusted for known impacts to our bookings and net sales from COVID-19 and other factors. Using this criteria, we estimate that our sales for the following fiscal quarters were further negatively impacted by the COVID-19 pandemic: (i) for the fiscal quarter ended April 4, 2020 — \$31.0 million, (ii) for the fiscal quarter ended July 4, 2020 — \$9.0 million, and (iii) for the fiscal quarter ended October 3, 2020 — an immaterial amount. The effect of COVID-19 as forecasted and as further experienced was most significant in Asia during the quarter ended April 4, 2020 and began impacting Europe and North America only later in the quarter ended April 4, 2020 as the virus spread globally. In the quarter ended July 4, 2020, the global economic effect of the COVID-19 pandemic was less significant, though continued to be high in certain regions. While we believe that COVID-19 was a partial cause of the decline in revenue in the second quarter of fiscal 2020, we also had lower shipments related to ELA tools in the flat panel display market and lower shipments in materials processing applications in the second quarter of fiscal 2020 that were mostly unrelated to COVID-19.

During fiscal 2020, the global demand environment was uncertain at times given the effects of COVID-19 on many businesses, including manufacturing facilities and customer confidence around the world. While we saw a partial recovery in order volumes in China in the latter half of March and the third quarter of fiscal 2020, this coincided with declining bookings in other regions, particularly in North America, and to a lesser extent in Europe and other countries in Asia. In the fourth quarter of fiscal 2020, we saw global demand recover in all regions and begin to return to a more normalized demand trend. However, we cannot predict future resurgences of COVID-19 and the impact that it may have on future demand for our products and services, particularly given the recently announced shutdown measures taken in certain countries in Europe.

Currently, our major production facilities in Europe, Southeast Asia and the United States remain open. At all of our locations, we have transitioned from business continuity plans to return-to-operations plans while continuing to maintain high standards of employee safety and sanitization protocols. Our Return to Operations Plans have a phased approach with the primary focus on employee safety, with a continuing requirement for "working from home" for other members of our work force wherever possible. We have vertically integrated manufacturing, and many of the components produced at certain of our facilities supply other company facilities, are single sourced internally and are not available from third-party suppliers (for example our semiconductor diodes are manufactured in Santa Clara, California). While we do maintain a safety stock of critical components at our various locations, the scope, timing and duration of various government restrictions to address the COVID-19 pandemic could impact our internal supply chain. We have implemented certain policy changes to help support our employees impacted by COVID-19. These measures have and will continue to increase the cost of our operations but the magnitude and length of time of this impact is difficult to quantify at this time and may continue to be difficult to estimate in the future. If our sales are reduced for an extended period or if our production output falls because of government restrictions, we may be required to reduce payroll-related costs and other expenses in the future through layoffs or furloughs, even though we have not done so to date.

We have not experienced significant supply disruption from third-party component suppliers. However, we continue to face some supply chain constraints primarily related to logistics, including available air cargo space and higher freight rates. Available cargo space on flights between the U.S. and Europe, and Europe and Asia has been and remains limited as a result of the impact from COVID-19 and government and business responses to it, and this has increased shipping time and costs. In addition, shipments between countries have been more severely impacted by COVID-19 and we are experiencing delays due to additional checks at border crossings, including within Europe and Asia. There has also been sporadic restrictions on individual travel between certain states in the United States of America as well. Government actions related to COVID-19 come on the heels of increasing trade tensions between the United States and China, which may continue. We believe we have the ability to meet the near-term demand for our products, but the situation is fluid and subject to change.

We continue to monitor the rapidly evolving conditions and circumstances as well as guidance from international and domestic authorities, including public health authorities, and we may need to take additional actions based on their recommendations. There is considerable uncertainty regarding the impact on our business stemming from current measures and potential future measures that could restrict access to our facilities, limit our manufacturing and support operations and place restrictions on our workforce, customers and suppliers. The measures implemented by various authorities related to the COVID-19 outbreak have caused us to change our business practices including those related to where employees work, the distance between employees in our facilities, limitations on in-person meetings between employees and with customers, suppliers, service providers, and stakeholders as well as restrictions on some shipping activities, business travel to domestic and international locations or to attend trade shows, investor conferences and other events. In March of 2020, we formed a COVID Steering Committee to, among other things, propose, discuss, and implement best practices in response to COVID-19. The COVID Steering Committee meets weekly and more often if required. All of our executive officers are members of the COVID Steering Committee as are many key senior-level employees.

The COVID-19 pandemic has significantly increased worldwide and regional economic uncertainty and decreased demand for our products in many markets we serve, which could continue for an unknown period of time. In these circumstances, there may be developments outside of our control, including the length and extent of the COVID-19 outbreak, government-imposed measures and our ability to ship as well as install products and/or service installed products that may require us to adjust our operating plans. As such, given the dynamic nature of this situation, we cannot estimate with certainty the future impacts of COVID-19 on our financial condition, results of operations or cash flows. However, we do expect that it could have an adverse impact on our revenue as well as our overall profitability and may lead to an increase in inventory provisions, allowances for credit losses, and a volatile effective tax rate driven by changes in the mix of earnings across our markets.

See the additional Risk Factor included in Part I-Item 1A of this annual report regarding the impact of COVID-19.

Goodwill and other impairment charges

Based on our internal projections and the preparation of our financial statements for the quarter ended April 4, 2020, and considering the forecasted decrease in demand due to the COVID-19 pandemic and other factors, we believed that the fair value of our ILS reporting unit might no longer have exceeded its carrying value and performed an interim goodwill impairment test on the ILS and OLS reporting units. Based on the estimated fair value of the ILS reporting unit, in the quarter ended April 4, 2020, we recorded non-cash pretax goodwill impairment charges of \$327.2 million. In addition, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment and right of use ("ROU") assets as of April 4, 2020 and recorded non-cash pre-tax charges, in the quarter ended April 4, 2020, related to the impairment intangible assets, property, plant and equipment and ROU assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively. See Note 8, "Goodwill and Intangible Assets" and Note 11, "Leases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

Restructuring

In June 2019, we internally announced our plans to exit a portion of our High Power Fiber Laser ("HPFL") business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain HPFL activities from our Hamburg, Germany facility. In conjunction with this announcement, we recorded restructuring charges in fiscal 2019 of \$19.7 million. The charges primarily related to write-offs of excess inventory, which is recorded in cost of sales, and estimated severance. We recorded charges of \$1.1 million in fiscal 2020, primarily related to accelerated depreciation and project management consulting.

We also vacated our leased facility in Santa Clara at the end of the lease term on July 31, 2020 and combined operations into our owned Santa Clara headquarters. We did not incur material expenses in fiscal 2019 related to this project. In fiscal 2020, we incurred costs of \$1.5 million, primarily related to accelerated depreciation.

In the fourth quarter of fiscal 2020, we began a restructuring program in our ILS segment which includes management reorganizations, the planned closure of certain manufacturing sites, and the right-sizing of global sales, service, order admin, marketing communication and certain administrative functions, among others. In fiscal 2020, we incurred costs of \$2.6 million, primarily related to severance.

See Note 19, "Restructuring Charges" in the Notes to Consolidated Financial Statements under Item 8 of this annual report for further discussion of the restructuring charges.

Acquisitions

On October 5, 2018, we acquired privately held Ondax, Inc. ("Ondax") for approximately \$12.0 million, excluding transaction costs. Ondax developed and produced photonic components which are used on an OEM basis by the laser industry as well as incorporated into its own stabilized lasers and Raman Spectroscopy systems. See Note 4, "Business Combinations" in the Notes to Consolidated Financial Statements under Item 8 of this annual report for further discussion of the acquisition.

On October 5, 2018, we acquired certain assets of Quantum Coating, Inc. ("Quantum") for approximately \$7.0 million, excluding transaction costs. See Note 4, "Business Combinations" in the Notes to Consolidated Financial Statements under Item 8 of this annual report for further discussion of the acquisition.

Stock Repurchases

On February 5, 2020, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock through January 31, 2021. We made no repurchases under the program during fiscal 2020.

On October 28, 2018, our board of directors authorized a stock repurchase program for up to \$250.0 million of our common stock through December 31, 2019, with a limit of no more than \$75.0 million

per quarter. During fiscal 2019, we repurchased and retired 603,828 shares of outstanding common stock under this program at an average price of \$128.20 per share for a total of \$77.4 million. We made no repurchases under the program during fiscal 2020 and the program expired on December 31, 2019.

RESULTS OF OPERATIONS — FISCAL 2020 AND 2019

Fiscal 2020 consisted of 53 weeks and fiscal 2019 consisted of 52 weeks.

Consolidated Summary

The following table sets forth, for the years indicated, the percentage of total net sales represented by the line items reflected in our consolidated statements of operations:

	Fisc	al
	2020	2019
	(As a percentage	e of net sales)
Net sales	100.0%	100.0%
Cost of sales	66.6%	66.0%
Gross profit	33.4%	34.0%
Operating expenses:		
Research and development	9.4%	8.2%
Selling, general and administrative	22.0%	19.0%
Goodwill and other impairment charges	36.7%	
Amortization of intangible assets	0.3%	1.0%
Total operating expenses	68.4%	28.2%
Income (loss) from operations	(35.0)%	5.8%
Other income (expense), net	(1.0)%	(1.6)%
Income (loss) before income taxes	(36.0)%	4.2%
Provision for (benefit from) income taxes	(2.3)%	0.4%
Net income (loss)	<u>(33.7)</u> %	3.8%

Net loss for fiscal 2020 was \$414.1 million (\$17.18 per diluted share). This included after tax charges of \$423.2 million for goodwill and other impairment, \$39.1 million of after-tax stock-based compensation expense, \$21.9 million of after-tax amortization of intangible assets, \$2.1 million of after-tax restructuring costs (net of the gain on the sale-leaseback of our Hamburg facility), \$0.7 million after-tax of accelerated compensation for our former CEO, \$0.6 million non-recurring income tax net expense and \$0.9 million of excess tax benefits for employee stock-based compensation.

Net income for fiscal 2019 was \$53.8 million (\$2.22 per diluted share). This included \$44.0 million of after-tax amortization of intangible assets, \$31.5 million of after-tax stock-based compensation expense, \$16.0 million of after-tax restructuring costs, \$0.4 million of after-tax amortization of purchase accounting step up, \$1.7 million non-recurring income tax net expense, \$2.5 million of excess tax benefits for employee stock-based compensation and \$1.1 million of benefit from amounts received on a resolved asset recovery matter.

Backlog

Backlog represents orders which we expect to be shipped within 12 months and the current portion of service contracts. Orders used to compute backlog are generally cancellable and, depending on the notice period, are subject to rescheduling by our customers without substantial penalties. We have not historically experienced a significant rate of cancellation or rescheduling, however the rate of cancellations or rescheduling may increase in the future. In the first quarter of fiscal 2019, one customer cancelled three purchase orders which included \$38.2 million of orders shippable within 12 months of fiscal 2018 year-end and which was

included in backlog as of fiscal 2018 year-end. We reached agreement with this customer for a cancellation fee of \$7.0 million, which was recorded in net sales in the first quarter of fiscal 2019.

We had a backlog of orders shippable within 12 months of \$548.0 million at October 3, 2020, including a concentration in the flat panel display market (26%) for customers which are primarily located in Asia.

Net Sales

Market Application

The following table sets forth, for the periods indicated, the amount of net sales and their relative percentages of total net sales by market application (dollars in thousands):

	Fiscal 2020		Fiscal	2019
	Amount	Percentage of total net sales	Amount	Percentage of total net sales
Microelectronics	\$ 538,535	43.8%	\$ 632,176	44.2%
Materials processing	335,750	27.3%	404,878	28.3%
OEM components and instrumentation	248,547	20.2%	266,788	18.6%
Scientific and government programs	106,167	8.7%	126,798	8.9%
Total	\$1,228,999	100.0%	\$1,430,640	100.0%

During fiscal 2020, net sales decreased by \$201.6 million, or 14%, compared to fiscal 2019, with decreases in all four markets. The decrease included lower net sales of approximately \$40.0 million due to the impact from COVID-19 shelter-in place orders as well as delays in restarting non-essential manufacturing activity at many of our customers, which impacted all of our markets. In fiscal 2020, we continued to experience weaker demand in the microelectronics and materials processing markets. We finished fiscal 2020 with a positive book-to-bill ratio and increased backlog levels compared to fiscal 2019. Entering fiscal 2021, we are well-positioned with our laser-based technology to benefit from technology proliferation in rapid growth areas such as 5G, flexible OLED and MicroLED. In addition, we believe the market for laser-based medical instrumentation, devices and procedures will continue to grow with the aging population around the globe. We also anticipate that technology advances will result in increased defense spending.

During fiscal 2020, microelectronics sales decreased \$93.6 million, or 15%, compared to fiscal 2019 primarily due to weaker demand resulting in lower shipments related to ELA tools used in the flat panel display market as well as lower revenues from consumable service parts and a decrease due to a non-recurring fee of \$7.0 million that was recognized in fiscal 2019 related to the cancellation of orders from a customer for our ELA tools. In microelectronics, we expect future increases in ELA tool shipments as Asian manufacturers improve yields and ramp manufacturing as indicated by the fact that we have already received new orders for these products in our first quarter of fiscal 2021. In addition, it is expected that the handset market will transition to 5G technology. This technology requires more power from the battery which we expect will result in the handset manufacturers having to decide between shorter talk times or placement of larger batteries in existing form factors. Since OLED displays are much thinner than liquid crystal displays (LCD), we believe 5G will increase demand for OLED displays to accommodate larger batteries. In addition, we are seeing demand for laser solutions for MicroLED production. We believe that these technological demands will allow us to continue to maintain a leadership position in flat panel display applications. We are also seeing higher demand for semiconductor applications driven by continuous strength in cloud computing and data centers as well as in advanced packaging applications driven by 5G demand for smaller geometry, better power management and next generation printed circuit boards.

Materials processing sales decreased \$69.1 million, or 17%, during fiscal 2020 primarily due to decreased sales in marking, cutting and welding applications, primarily in China and Europe, and to a lesser extent in the United States. An index which often correlates to materials processing sales is the Purchasing Managers Index (PMI). PMI is a measure of the prevailing economic trends in manufacturing. While manufacturing PMI has been in a contraction state (<50 on the index) in South Korea, Taiwan, the EUROZONE and the U.S. for a year or so, the September 2020 PMI indicated an expansion in most major

economies. Additionally, other markets for sales of these applications have also been depressed (e.g. automobiles). We see some strength in non-metal applications such as packaging, medical device manufacturing (with the return of elective surgeries) and specialty semiconductor marking. Even before COVID-19, demand in the materials processing market was softening in some of the machine tools industries and the materials processing market continues to be negatively impacted by COVID-19. We are also seeing increased price and margin pressure from Chinese competitors in this market. The timing for our recovery in this market is uncertain.

The decrease in the OEM components and instrumentation market of \$18.2 million, or 7%, during fiscal 2020 was primarily due to lower shipments for medical applications. We expect strength in the healthcare market over the next several years. We supply lasers and optical systems for biomedical instrumentation applications and our lasers have been used in diagnostic instruments in applications including gene sequencing, biomarker identification and vaccine development. Applications dependent on discretionary spending by consumers, including tools and components used in discretionary medical procedures, as well as certain research applications continue to be negatively impacted by COVID-19 but to a lesser extent than in midfiscal 2020. We are seeing indications that the market is starting to recover. We anticipate the defense market, especially amplifiers for directed energy, countermeasures as well as specialty optics for aerospace, to be a multi-year growth opportunity for us.

The decrease in scientific and government programs market sales of \$20.6 million, or 16%, during fiscal 2020 was primarily due to lower demand for advanced research applications used by university and government research groups, primarily in the United States and Asia, due to the closures of universities and research institutions due to COVID-19 shelter-in-place orders during mid-fiscal 2020. We saw improved demand in the fourth quarter of fiscal 2020 as universities and research institutions began to reopen. We expect demand in the scientific and government programs market to continue to fluctuate from quarter to quarter.

The timing for shipments of our higher average selling price ELA tools in the flat panel display market has historically fluctuated and is expected to continue to fluctuate from quarter-to-quarter due to customer scheduling, market conditions, our ability to manufacture these products and/or availability of critical component parts and supplies. As a result, the timing to convert orders for these products to net sales will likely fluctuate from quarter-to-quarter.

We have historically generally experienced decreased revenue in the first fiscal quarter compared to other quarters in our fiscal year due to the impact of time off and business closures at our facilities and those of many of our customers due to year-end holidays. For example, over the past 10 years, excluding certain recovery years, our first fiscal quarter revenues have ranged 2%-17% below the fourth quarter of the prior fiscal years.

In fiscal 2020 and 2019, one customer accounted for 17% of net sales.

Segments

We are organized into two reportable operating segments: OLS and ILS. While both segments deliver cost-effective, highly reliable photonics solutions, OLS is focused on high performance laser sources and complex optical sub-systems, typically used in microelectronics manufacturing, medical diagnostics and therapeutic applications, as well as in scientific research. ILS delivers high performance laser sources, sub-systems and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tools, consumer goods and medical device manufacturing.

The following table sets forth, for the periods indicated, the amount of net sales and their relative percentages of total net sales by segment (dollars in thousands):

	Fiscal 2020		Fiscal 2019	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales
OEM Laser Sources (OLS)	\$ 758,929	61.8%	\$ 886,676	62.0%
Industrial Lasers & Systems (ILS)	470,070	38.2%	543,964	38.0%
Total	\$1,228,999	100.0%	\$1,430,640	100.0%

Net sales for fiscal 2020 decreased \$201.6 million, or 14%, compared to fiscal 2019, with decreases of \$127.7 million, or 14%, in our OLS segment and decreases of \$73.9 million, or 14%, in our ILS segment. The fiscal 2020 decreases in both OLS and ILS segment sales included decreases due to the unfavorable impact of foreign exchange rates.

The decrease in our OLS segment sales in fiscal 2020 was primarily due to weaker demand for ELA tools resulting in lower shipments of ELA tools used in the flat panel display market and lower revenues from consumable service parts. The decrease included lower sales of approximately \$26.0 million due to COVID-19. In addition, the decrease was due to a non-recurring fee of \$7.0 million that was recognized in the first quarter of fiscal 2019 related to the cancellation of orders from one customer for our ELA tools. In addition, OLS sales decreased due to lower demand for advanced research applications used by university and government research groups, primarily in the United States and Asia.

The decrease in our ILS segment sales from fiscal 2019 to fiscal 2020 was primarily due to lower sales for materials processing and lower sales for medical applications within the OEM components and instrumentation market. The decrease included lower sales of approximately \$14.0 million due to COVID-19.

Gross Profit

Consolidated

Our gross profit percentage decreased by 0.6% to 33.4% in fiscal 2020 from 34.0% in fiscal 2019. The decrease included a 1.2% favorable impact of lower restructuring costs, primarily related to the write-off of inventories and severance costs in the third quarter of fiscal 2019 due to our exit from a portion of our HPFL business and 1.2% lower amortization of intangibles primarily due to the impairment of ILS intangibles in the second quarter of fiscal 2020. Excluding the 2.4% favorable impact of lower restructuring costs and intangibles amortization, gross profit percentage decreased 3.0% primarily due to unfavorable product margins (2.0%), higher other costs (1.4%) and higher stock-based compensation expense (0.1%) as a percentage of sales partially offset by lower warranty and installation costs (0.5%) as a percentage of sales. The unfavorable product margins were in both segments and were primarily due to unfavorable absorption of manufacturing costs on lower volumes including the impact of idle facilities due to COVID-19 as well as unfavorable product margins in OLS as a result of lower shipments of higher margin flat panel display systems. In addition, the unfavorable impact (0.3%) of a \$7.0 million non-recurring fee recognized in the first quarter of fiscal 2019 related to the cancellation of orders from one customer for our ELA tools contributed to the decrease. Other costs were higher primarily due to higher inventory provisions for excess and obsolete inventory in certain ILS business units due to lower forecasted demand and changing business conditions, net of lower inventory provisions for excess and obsolete inventory in certain OLS business units. The lower warranty and installation costs were primarily in our ILS segment and included lower warranty events with the largest impact from fiber lasers, primarily sold into China, partially offset by the impact of lower sales volumes.

Our gross profit percentage has been and will continue to be affected by a variety of factors including the impact of COVID-19, shipment volumes, product mix, pricing on volume orders, our ability to manufacture advanced and more complex products, manufacturing efficiencies, excess and obsolete inventory write-downs, warranty costs, amortization of intangibles, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, commodity prices and foreign currency fluctuations against the U.S. Dollar, particularly the recent volatility of the Euro and to a lesser extent, the Japanese Yen and South Korean Won. Our gross profit in future quarters will continue to be favorably impacted by lower amortization and depreciation as a result of the impairments of long-lived assets in our ILS segment in the second quarter of fiscal 2020. We have embarked on a number of internal strategic initiatives and are expecting that the impact of those will include an improvement of our gross margins by the end of calendar 2021

OEM Laser Sources

Our OLS gross profit percentage decreased by 1.3% to 46.0% in fiscal 2020 from 47.3% in fiscal 2019 primarily due to unfavorable product margins (1.6%) as a result of the impact of both lower shipments of higher margin flat panel display systems and lower revenues from consumable service parts and the unfavorable

impact of a \$7.0 million non-recurring fee recognized in the first quarter of fiscal 2019 related to the cancellation of orders from one customer for our ELA tools partially offset by unfavorable absorption of manufacturing costs on lower volumes. The unfavorable product margins were partially offset by lower other costs (0.2%) due to lower inventory provisions for excess and obsolete inventory in certain business units as well as lower intangibles amortization (0.1%) as a percentage of sales.

Industrial Lasers & Systems

Our ILS gross profit percentage increased by 1.2% to 14.5% in fiscal 2020 from 13.3% in fiscal 2019. The increase included a 3.1% favorable impact of lower restructuring costs, primarily related to the write-off of inventories and severance costs in the third quarter of fiscal 2019 due to our exit from a portion of our HPFL business and 3.0% lower amortization of intangibles due to the impairment of ILS intangibles in the second quarter of fiscal 2020. Excluding the 6.1% favorable impact of lower restructuring costs and intangibles amortization, gross profit percentage decreased 4.9% primarily due to higher other costs (3.9%) due to higher inventory provisions for excess and obsolete inventory in several business units as a percentage of sales and unfavorable product costs (2.5%) including unfavorable absorption of manufacturing costs on lower volumes over multiple products. The decreases were partially offset by 1.5% lower warranty and installation costs as a percentage of sales due to fewer warranty events, particularly for our HPFL products sold in China, partially offset by higher warranty events for fiber components and diode components products.

Operating Expenses

The following table sets forth, for the periods indicated, the amount of operating expenses and their relative percentages of total net sales by the line items reflected in our consolidated statement of operations (dollars in thousands):

	Fiscal 2020		Fiscal 2019	
	Amount	Percentage of total ount net sales An		Percentage of total net sales
		(Dollars in	thousands)	
Research and development	\$115,578	9.4%	\$117,353	8.2%
Selling, general and administrative	270,464	22.0%	272,257	19.0%
Impairment and other charges	451,025	36.7%	_	%
Amortization of intangible assets	3,987	0.3%	13,760	1.0%
Total operating expenses	\$841,054	<u>68.4</u> %	\$403,370	<u>28.2</u> %

Research and development

Fiscal 2020 research and development ("R&D") expenses decreased \$1.8 million, or 2%, from fiscal 2019, but increased to 9.4% of sales, compared to 8.2% in fiscal 2019. The decrease in R&D expenses was primarily due to \$3.7 million lower headcount spending and \$0.2 million lower spending on materials, including lower customer reimbursements and the favorable impact of foreign exchange rates (primarily the weaker Euro). Headcount spending decreased \$3.7 million due to lower restructuring costs for severance, lower spending due to the impact of headcount reductions and the favorable impact of foreign exchange rates partially offset by the impact of an extra week in the second quarter of fiscal 2020. Partially offsetting the decrease, R&D expenses increased \$1.5 million due to higher stock-based compensation expense due to increased grants to employees and \$0.6 million as a result of higher charges for increases in deferred compensation plan liabilities.

On a segment basis as compared to fiscal 2019, OLS R&D spending increased \$2.4 million in fiscal 2020 primarily due to higher net spending on headcount and materials partially offset by the favorable impact of foreign exchange rates. ILS R&D spending decreased \$4.5 million primarily due to lower headcount spending, lower net spending on materials and the favorable impact of foreign exchange rates. Corporate and other R&D spending increased \$0.3 million primarily due to higher stock-based compensation expense

and higher charges for increases in deferred compensation plan liabilities partially offset by lower headcount spending, including severance, in our former Advanced Research business unit.

Selling, general and administrative

Fiscal 2020 selling, general and administrative ("SG&A") expenses decreased \$1.8 million, or 1%, from fiscal 2019. The decrease was primarily due to \$14.5 million lower variable spending partially offset by \$6.4 million higher stock-based compensation expense, \$3.2 million higher charges for increases in deferred compensation plan liabilities and \$3.1 million higher spending on headcount. The \$14.5 million lower variable spending included lower spending on travel and other variable discretionary spending due to COVID-19, lower depreciation expense due to the impairment of ILS long-lived assets in the second quarter of fiscal 2020, lower provisions for bad debts, a gain on the sale-leaseback of our Hamburg facility, lower sales rep commissions and the favorable impact of foreign exchange rates, partially offset by higher consulting and audit spending on special projects and higher accelerated depreciation due to the consolidation of buildings at our headquarters. The \$6.4 million higher stock-based compensation expense is primarily due to the acceleration of the accounting charges for equity grants for our former CEO and other executives who are retiring and increased grants to employees. The \$3.1 million higher spending on headcount was primarily due to the impact of one extra week in the second quarter of fiscal 2020, lower vacation usage due to COVID-19 and higher costs related to the retirement of our former CEO partially offset by the impact of lower headcount and the favorable impact of foreign exchange rates.

On a segment basis as compared to fiscal 2019, OLS SG&A expenses decreased \$2.0 million primarily due to lower variable spending including travel, sales rep commissions and other discretionary spending and as well as the favorable impact of foreign exchange rates partially offset by higher headcount spending and higher accelerated depreciation due to the consolidation of buildings at our headquarters. ILS SG&A spending decreased \$16.6 million primarily due to lower variable spending (including lower spending on travel and other variable discretionary spending due to COVID-19, lower sales rep commissions, lower provisions for bad debts and lower depreciation expense), lower spending on headcount (lower severance and the impact of lower headcount net of the impact of one extra week in the second quarter of fiscal 2020) and the favorable impact of foreign exchange rates. Corporate and other SG&A spending increased \$16.8 million primarily due to higher stock-based compensation expense, higher consulting and audit spending for special projects and higher charges for the deferred compensation plan as well as higher headcount spending including higher costs related to the retirement of our former CEO.

Goodwill and other impairment charges

In the second quarter of fiscal 2020, we recorded non-cash pre-tax goodwill impairment charges of \$327.2 million related to our ILS segment to operating expense in our results of operations. In addition, we recorded non-cash pre-tax charges related to the impairment of intangible assets, property, plant and equipment and ROU assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively. See Note 8, "Goodwill and Intangible Assets" in the Notes to Consolidated Financial Statements and Note 11, "Leases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

In the first quarter of fiscal 2019, we invested 3.0 million Euros (\$3.4 million) in 3D-Micromac AG, a private company in Germany. The investment is included in other assets and is being carried on a cost basis. During the second quarter of fiscal 2020, we determined that our investment became impaired and wrote it down to its fair value. As a result, we recorded a non-cash impairment charge of \$2.5 million to operating expense in our results of operations in the second quarter of fiscal 2020.

Amortization of intangible assets

Amortization of intangible assets decreased \$9.8 million, or 71%, from fiscal 2019 to fiscal 2020 primarily due to the impairment of ILS intangibles in the second quarter of fiscal 2020, the completion of the amortization of certain intangibles from acquisitions and the favorable impact of foreign exchange rates.

Other income (expense), net

Other income (expense), net, decreased by \$10.5 million to other expense of \$12.5 million in fiscal 2020 from other expense of \$23.0 million in fiscal 2019. The lower expenses were primarily due to \$5.0 million higher gains, net of expenses, on our deferred compensation plan assets, \$2.3 million lower foreign exchange losses, \$2.1 million lower interest expense and \$1.5 million lower benefit from non-service pension income. Interest expense decreased primarily due to lower amortization of debt issuance costs related to our Euro Term Loan and lower interest expense on our Revolving Credit Facility partially offset by higher interest on the Euro Term Loan.

Income taxes

Our effective tax rate on loss from continuing operations before income taxes for fiscal 2020 of 6.5% was lower than the U.S. federal tax rate of 21%. Our effective tax rate benefit for fiscal 2020 was unfavorably impacted primarily due to the impairment of goodwill that is not deductible for tax purposes and the establishment of valuation allowances for certain deferred tax assets. These unfavorable impacts were partially offset primarily from the release of unrecognized tax benefits net of settlements and competent authority offsets and losses in foreign jurisdictions subject to tax rates that are higher than the U.S. tax rates.

Our effective tax rate on income from continuing operations before income taxes for fiscal 2019 of 10.4% was lower than the U.S. federal tax rate of 21.0% primarily due to the tax benefit from losses of our German subsidiaries, which are subject to higher tax rates than U.S. tax rates, adjustments related to the Tax Act's transition tax, the net excess tax benefits from restricted stock unit vesting, the benefit of federal research and development tax credits and our Singapore and South Korea tax exemptions. These amounts were partially offset by an accrual for foreign withholding taxes on certain current year foreign earnings not considered permanently reinvested, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under Internal Revenue Code ("IRC") Section 162(m).

On March 27, 2020, the CARES Act was enacted and signed into law. U.S. GAAP rules require recognition of the tax effects of new legislation during the reporting period that includes the enactment date. The CARES Act, among other things, includes tax provision changes that benefit business entities and it makes certain technical corrections to the Tax Act. The tax relief measures for businesses include a five-year net operating loss ("NOL") carryback for any NOL generated in a taxable year beginning after December 31, 2017 and before January 1, 2021, suspension of the 80% limitation of NOL utilization for taxable years beginning before 2021, changes in the deductibility of interest, acceleration of alternative minimum tax credit refunds, payroll tax relief, and technical corrections allowing accelerated deductions for qualified improvement property. The CARES Act also provided other non-tax benefits, including employee retention credits, to assist businesses impacted by the pandemic. There is no material impact of the tax benefits under the CARES Act on our consolidated financial statements.

Coherent Singapore made an additional capital contribution to Coherent Korea in fiscal 2019 to take advantage of the High-Tech tax exemption provided by the Korean authorities. The High-Tech tax exemption is effective retroactively to the beginning of fiscal 2019 and the amount was used entirely in that year. There was no additional benefit available for fiscal 2020. For fiscal 2019, the tax exemption decreased Coherent Korea income taxes by approximately \$2.4 million and the benefit of the tax holiday on net income per diluted share was \$0.10.

In October 2016, Coherent Singapore received an amended Pioneer Status tax exemption from the Singapore authorities effective from fiscal 2012 through fiscal 2021. The tax holiday continues to be conditional upon our meeting certain revenue, business spending and employment thresholds. The impact of this tax exemption decreased Coherent Singapore income taxes by approximately \$2.6 million and \$3.9 million in fiscal 2020 and 2019, respectively. The benefits of the tax holiday on net income per diluted share were \$0.11 and \$0.16, respectively.

FINANCIAL CONDITION

Liquidity and capital resources

At October 3, 2020, we had assets classified as cash and cash equivalents and short-term investments, in an aggregate amount of \$475.6 million, compared to \$306.0 million at September 28, 2019. In addition, at October 3, 2020, we had \$5.3 million of restricted cash. At October 3, 2020, approximately \$349.7 million of our cash and securities was held in certain of our foreign subsidiaries and branches, \$334.3 million of which was denominated in currencies other than the U.S. Dollar. Our current plans do not demonstrate a need for these funds to support our domestic operations. If, however, a portion of these funds are needed for and distributed to our operations in the United States, we may be subject to additional foreign withholding taxes and certain state taxes. The amount of the U.S. and foreign taxes due would depend on the amount and manner of repatriation, as well as the location from where the funds are repatriated. We historically asserted our intention to indefinitely reinvest foreign earnings. As a result of the enactment of the Tax Act and certain income tax treaty updates, we no longer consider foreign earnings to be indefinitely reinvested in our foreign subsidiaries. We actively monitor the third-party depository institutions that hold these assets, primarily focusing on the safety of principal and secondarily maximizing yield on these assets. We diversify our cash and cash equivalents and investments among various financial institutions, money market funds, sovereign debt and other securities in order to reduce our exposure should any one of these financial institutions or financial instruments fail or encounter difficulties. To date, we have not experienced any material loss or lack of access to our invested cash, cash equivalents or short-term investments. However, we can provide no assurances that access to our invested cash, cash equivalents or short-term investments will not be impacted by adverse conditions in the financial markets. To date, we have had sufficient liquidity to manage the financial impact of COVID-19. However, we can provide no assurance that this will continue to be the case if the impact of COVID-19 is prolonged or if there is an extended impact on us or the economy in general. Further, COVID-19 has caused significant uncertainty and volatility in the credit markets. If our liquidity or access to capital becomes significantly constrained, or if costs of capital increase significantly due to the impact of COVID-19 as result of a volatility in the capital markets, a reduction in our creditworthiness or other factors, then our financial condition, results of operations and cash flows could be materially adversely affected.

See ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK below for more information about risks and trends related to foreign currencies.

Sources and Uses of Cash

Historically, our primary source of cash has been provided by operations. Other sources of cash in the past few fiscal years include proceeds from our Euro Term Loan used to finance our acquisition of Rofin, proceeds received from the sale of our stock through our employee stock purchase plan as well as borrowings under our Revolving Credit Facility. Our historical uses of cash have primarily been for acquisitions of businesses and technologies, capital expenditures, the repurchase of our common stock and debt issuance

costs. Supplemental information pertaining to our historical sources and uses of cash is presented as follows and should be read in conjunction with our Consolidated Statements of Cash Flows and notes thereto (in thousands):

	Fis	cal
	2020	2019
Net cash provided by operating activities	\$206,907	\$181,401
Purchases of property and equipment	(64,919)	(83,283)
Acquisition of businesses, net of cash acquired	_	(18,881)
Investment in 3D-Micromac AG	_	(3,423)
Borrowings (repayments), net	(9,699)	263
Issuance of shares under employee stock plans	13,362	11,811
Repurchases of common stock	_	(77,410)
Net settlement of restricted common stock	(13,549)	(15,179)

Net cash provided by operating activities increased by \$25.5 million in fiscal 2020 compared to fiscal 2019. The increase in cash provided by operating activities in fiscal 2020 was primarily due to higher cash flows from deferred taxes, taxes payable, accounts payable and inventories partially offset by lower net income (net of non-cash adjustments) and lower cash flows from accounts receivable. In order to support our liquidity during the pandemic, we are proactively taking measures to increase available cash on hand, including, but not limited to, reducing discretionary spending for operating and capital expenses. To further support our liquidity, we have elected to defer the payment of our employer portion of social security taxes beginning in April 2020 and through the end of the calendar year, which we expect to pay in equal installments in the first quarters of fiscal 2022 and 2023, as provided for under the CARES Act. We are also taking advantage of the retention credit of the CARES Act for employees who are idled as a result of COVID-19. We believe that our existing cash, cash equivalents and short term investments combined with cash to be provided by operating activities and amounts available under our Revolving Credit Facility will be adequate to cover our working capital needs and planned capital expenditures for at least the next 12 months to the extent such items are known or are reasonably determinable based on current business and market conditions, including consideration of the impact of COVID-19. However, we may elect to finance certain of our capital expenditure requirements through other sources of capital. We continue to follow our strategy to further strengthen our financial position by using available cash flow to fund operations.

We intend to continue to consider acquisition opportunities at valuations we believe are reasonable based upon market conditions. However, we cannot accurately predict the timing, size and success of our acquisition efforts or our associated potential capital commitments. Furthermore, we cannot assure you that we will be able to acquire businesses on terms acceptable to us. We expect to fund future acquisitions, if any, through existing cash balances and cash flows from operations (as in our acquisitions of Ondax and certain Quantum assets) and additional borrowings (as in our acquisition of Rofin). If required, we will consider the issuance of securities. The extent to which we will be willing or able to use our common stock to make acquisitions will depend on its market value at the time and the willingness of potential sellers to accept it as full or partial payment. On July 31, 2020, we reached an agreement to purchase Electro-optics Technology, Inc., a highly specialized U.S.-based components company, which will enable us to vertically integrate and improve the performance of our directed energy amplifier technology. We expect the acquisition to close in the second quarter of fiscal 2021, after we clear all regulatory requirements. We do not believe this acquisition will have a material impact on our liquidity or capital resources.

In fiscal 2019, we made debt principal payments of \$7.5 million, recorded interest expense on the Euro Term Loan of \$11.7 million and recorded \$4.6 million amortization of debt issuance costs. On November 20, 2018, we borrowed an additional \$40.0 million under our Revolving Credit Facility, subsequently repaid \$30.0 million of these borrowings on July 29, 2019 and recorded interest expense related to it of \$1.9 million in fiscal 2019.

In fiscal 2020, we made debt principal payments of \$7.5 million, recorded interest expense on the Euro Term Loan of \$12.3 million and recorded \$3.3 million amortization of debt issuance costs. In fiscal 2020, we recorded interest expense related to our Revolving Credit Facility of \$0.6 million.

On October 5, 2018, we acquired privately held Ondax for approximately \$12.0 million, excluding transaction costs. On October 5, 2018, we acquired certain assets of Quantum for approximately \$7.0 million, excluding transaction costs.

On October 28, 2018, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$250.0 million of our common stock through December 31, 2019, with a limit of no more than \$75.0 million per quarter. During fiscal 2019, we repurchased and retired 603,828 shares of outstanding common stock under this program at an average price of \$128.20 per share for a total of \$77.4 million. We made no repurchases under the program during fiscal 2020 and the program expired on December 31, 2019. See Note 14, "Stock Repurchases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

On February 5, 2020, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock through January 31, 2021. We have made no repurchases under the program during fiscal 2020. See Note 14, "Stock Repurchases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

Additional sources of cash available to us, in addition to the amounts available under the Revolving Credit Facility, were international currency lines of credit and bank credit facilities totaling \$16.9 million as of October 3, 2020, of which \$16.1 million was unused and available. These unsecured international credit facilities were used in Europe and Japan during fiscal 2020. As of October 3, 2020, we had utilized \$0.8 million of the international credit facilities as guarantees in Europe.

Our ratio of current assets to current liabilities decreased to 4.5:1 at October 3, 2020 compared to 4.6:1 at September 28, 2019. The decrease in our ratio was primarily due to lease liabilities recorded as a result of the adoption of ASC 842, higher accounts payable and lower accounts receivable partially offset by increases in our ratio due to higher cash and cash-equivalents. Our cash and cash equivalents, short-term investments and working capital are as follows (in thousands):

	Fiscai	
	2020	2019
Cash and cash equivalents	\$440,258	\$305,833
Short-term investments	35,346	120
Working capital	943,606	854,507

Contractual Obligations and Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements as defined by Regulation S-K of the Securities Act of 1933. The following summarizes our significant contractual obligations at October 3, 2020 and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
Operating lease obligations, including imputed interest	\$112,170	\$ 18,781	\$33,536	\$ 22,951	\$36,902
Finance lease obligations, including imputed interest	579	404	175	_	_
Asset retirement obligations	6,805	300	2,325	1,826	2,354
Debt principal, interest and fees	466,152	22,995	44,131	399,026	_
Pension obligations	60,607	2,597	5,500	5,805	46,705
Purchase commitments for inventory	33,675	33,587	63	25	_
Purchase obligations-other	50,836	48,429	2,104	303	_
Total	\$730,824	\$127,093	\$87,834	\$429,936	\$85,961

Our purchase commitments for inventory represent an estimate of significant commitments to purchase inventory from our suppliers in the ordinary course of business. Our purchase obligations-other

represent an estimate of significant purchase commitments associated with the construction of a new manufacturing facility and other services in the ordinary course of business and include commitments of \$29.8 million to purchase property and equipment in one of our manufacturing sites in Germany, primarily related to the construction of a new manufacturing facility. Because of the uncertainty as to the timing of such payments, we have excluded cash payments related to our contractual obligations for our deferred compensation plans aggregating \$44.6 million at October 3, 2020. As of October 3, 2020, we had gross unrecognized tax benefits of \$42.4 million which includes penalties and interest of \$2.9 million. Approximately \$15.4 million has been recorded as a noncurrent liability. At this time, we are unable to make a reasonably reliable estimate of the timing of payments in individual years in connection with these tax liabilities; therefore, such amounts are not included in the above contractual obligation table.

Changes in financial condition

Cash provided by operating activities in fiscal 2020 was \$206.9 million, which included non-cash goodwill and other impairment charges of \$451.0 million, depreciation and amortization of \$76.8 million, cash provided by operating assets and liabilities of \$51.8 million (primarily lower accounts receivable, lower inventories and higher accounts payable net of lower income taxes payable and payments made for lease liabilities), stock-based compensation expense of \$44.8 million, amortization of operating ROU assets of \$16.0 million, amortization of debt issue costs of \$3.3 million and non-cash restructuring charges of \$2.2 million, partially offset by net loss of \$414.1 million and net increases in deferred tax assets of \$24.5 million. Cash provided by operating activities in fiscal 2019 was \$181.4 million, which included depreciation and amortization of \$116.4 million, net income of \$53.8 million, stock-based compensation expense of \$36.5 million, non-cash restructuring charges of \$12.6 million and amortization of debt issue costs of \$4.6 million, partially offset by cash used by operating assets and liabilities of \$19.1 million (primarily lower income taxes payable, accounts payable, customer deposits and deferred income net of lower accounts receivable and lower inventories) and net decreases in deferred tax assets of \$14.9 million.

Cash used in investing activities in fiscal 2020 was \$78.2 million, which included \$43.0 million, net of proceeds from dispositions including \$21.5 million received from the sale-leaseback of our Hamburg facility, used to acquire property and equipment and to purchase and upgrade buildings and \$35.2 million net purchases of available-for-sale securities. Cash used in investing activities in fiscal 2019 was \$100.3 million, which included \$78.0 million, net of proceeds from dispositions, used to acquire property and equipment and to purchase and upgrade buildings, \$18.9 million net of cash acquired to purchase Ondax and Quantum and \$3.4 million invested in 3D-Micromac AG, a private company in Germany.

Cash used in financing activities in fiscal 2020 was \$9.9 million, which included \$13.5 million in outflows due to net settlement of restricted stock units and \$9.7 million net debt payments partially offset by \$13.4 million generated from our employee stock option and purchase plans. Cash used in financing activities in fiscal 2019 was \$80.5 million, which included \$77.4 million used to repurchase shares of our common stock and \$15.2 million outflows due to net settlement of restricted stock units, partially offset by \$11.8 million generated from our employee stock purchase plans and \$0.3 million net debt borrowings.

Changes in exchange rates in fiscal 2020 resulted in an increase in cash balances of \$8.0 million. Changes in exchange rates in fiscal 2019 resulted in a decrease in cash balances of \$6.0 million.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2, "Significant Accounting Policies" in the Notes to Consolidated Financial Statements under Item 8 of this annual report for a full description of recent accounting pronouncements, including the respective dates of adoption or expected adoption and effects on our consolidated financial position, results of operations and cash flows.

APPLICATION OF CRITICAL ACCOUNTING POLICIES

Our discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America and pursuant to the rules and regulations of the SEC. The preparation of these consolidated financial statements requires management to make estimates and

assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. We have identified the following as the items that require the most significant judgment and often involve complex estimation: revenue recognition, business combinations, accounting for long-lived assets (including goodwill and intangible assets), inventory valuation, warranty reserves and accounting for income taxes.

Revenue Recognition

Revenue is recognized when transfer of control to the customer occurs in an amount reflecting the consideration that we expect to be entitled. We determine revenue recognition by applying the following five-step approach: (1) identification of the contract, or contracts, with a customer; (2) identification of the performance obligations in the contract; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contract; and (5) recognition of revenue when, or as, we satisfy each performance obligation.

The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring goods or services to the customer adjusted for estimated variable consideration, if any, as more fully described in Note 2, "Significant Accounting Policies — Revenue Recognition," in the Notes to Consolidated Financial Statements under Item 8 of this annual report. The majority of products and services offered by us have readily observable selling prices. As a part of our stand-alone selling price policy, we review product pricing on a periodic basis to identify any significant changes and revise our expected selling price assumptions as appropriate. Revenue is generally recognized when control of the product is transferred to the customer (i.e., when our performance obligation is satisfied), which typically occurs at shipment but which can occur over time for certain of our maintenance, extended warranty or custom product contracts. When goods or services have been delivered to the customer, but all conditions for revenue recognition have not been met, deferred revenue and deferred costs are recorded on our consolidated balance sheet. Recognizing revenue over time also includes an estimation of the progress towards completion based on the projected costs for the contract.

Business Combinations

We include the results of operations of the businesses that we acquire as of the respective dates of acquisition. We allocate the fair value of the purchase price of our business acquisitions to the tangible assets acquired, liabilities assumed, and intangible assets acquired, based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. Additional information existing as of the acquisition date, but unknown to us at that time, may become known during the remainder of the measurement period, not to exceed 12 months from the acquisition date, which may result in changes to the amounts and allocations recorded.

Long-Lived Assets and Goodwill

We evaluate long-lived assets and amortizable intangible assets whenever events or changes in business circumstances or our planned use of assets indicate that their carrying amounts may not be fully recoverable or that their useful lives are no longer appropriate. Reviews are performed to determine whether the carrying values of the assets are impaired based on comparison to the undiscounted expected future cash flows identifiable to such long-lived and amortizable intangible assets. If the comparison indicates that impairment exists, the impaired asset is written down to its fair value.

We have determined that our reporting units are the same as our operating segments as each constitutes a business for which discrete financial information is available and for which segment management regularly reviews the operating results. We make this determination in a manner consistent with how the operating segments are managed. Based on this analysis, we have identified two reporting units which are our reportable segments; OLS and ILS.

Goodwill is tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired (See Note 8, "Goodwill and Intangible Assets" in the Notes to Consolidated Financial Statements under Item 8 of this annual report). We generally perform our annual impairment

tests during the fourth quarter of each fiscal year using the opening balance sheet as of the first day of the fourth fiscal quarter, with any resulting impairment recorded in the fourth quarter of the fiscal year.

In the quarter ended April 4, 2020, the worldwide spread of COVID-19 created significant volatility, uncertainty and disruption to the global economy, representing an indicator to test our goodwill for impairment. Based on our internal projections and the preparation of our financial statements for the quarter ended April 4, 2020, and considering the forecasted decrease in demand due to the COVID-19 pandemic and other factors, we believed that the fair value of our ILS reporting unit might no longer have exceeded its carrying value and performed an interim goodwill impairment test on the ILS reporting unit. We also performed an interim goodwill impairment test on the OLS reporting unit.

Our goodwill impairment tests for the ILS and OLS reporting units were performed by comparing the fair value of the reporting units with their carrying values and recognizing an impairment charge for the amount by which the carrying value exceeded the fair value. Based on the estimated fair value of the ILS reporting unit, in the quarter ended April 4, 2020, we recorded a non-cash pre-tax charge related to the ILS reporting unit of \$327.2 million, reducing the goodwill balance of the reporting unit to zero. The impairment charge was primarily the result of a decline in projected cash flows of the ILS reporting unit driven by lower forecasted sales volumes and profitability in several business units. The impairment charge was also the result of changes in certain market-related inputs to the analysis to reflect macro-economic changes caused by the impact of COVID-19, including lower pricing multiples for comparable public companies. No impairment charge was recognized for the OLS reporting unit as the fair value significantly exceeded the carrying value of the reporting unit.

In assessing goodwill for impairment, we were required to make significant judgments related to the fair value of our reporting units. We used a combination of the Income (discounted cash flow) approach and the Market (market comparable) approach to estimate the fair value of our reporting units. The Income approach utilizes the discounted cash flow model to provide an estimation of fair value based on the cash flows that a business expects to generate. These cash flows are based on forecasts developed internally by management which are then discounted at an after tax rate of return required by equity and debt market participants of a business enterprise. Our assumptions used in the forecasts are based on historical data, supplemented by current and anticipated market conditions, estimated growth rates and management's plans. The rate of return on cost of capital is weighted based on the capitalization of comparable companies. We utilized a discount rate for each of our reporting units that represents the risks that our businesses face, considering their sizes, their current economic environment and other industry data as we believe is appropriate. The Market approach determines fair value by comparing the reporting units to comparable companies in similar lines of business that are publicly traded. The selection of comparable companies is based on the markets in which the reporting units operate giving consideration to risk profiles, size, geography and diversity of products and services. Total Enterprise Value (TEV) multiples such as TEV to revenues and TEV to earnings (if applicable) before interest and taxes of the publicly traded companies are calculated. We utilized multiples for each of our reporting units that represent the risks that our businesses face, considering their sizes, their current economic environment and other industry data as we believe is appropriate. The interim goodwill impairment testing results were also reconciled with our market capitalization as of April 4, 2020, as the final step in the impairment testing.

Before performing the goodwill impairment test for the ILS reporting unit, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment and ROU assets as of April 4, 2020, due primarily to the same indicators that led to the interim goodwill impairment testing. Based on the impairment tests performed, we concluded that some of the long-lived assets allocated to the asset group of the ILS reporting unit were impaired as of April 4, 2020. Accordingly, we recorded non-cash pre-tax charges in the quarter ended April 4, 2020 related to the intangible assets, property, plant and equipment and right-of-use ("ROU") assets of the ILS reporting unit of \$33.9 million, \$85.6 million and \$1.8 million, respectively. We did not identify any indicators that would lead us to believe that the carrying value of the long-lived assets allocated to the asset group of the OLS reporting unit may not be recoverable as of April 4, 2020.

In assessing our long-lived assets for impairment, we were required to make significant judgments related to the fair value of our long-lived assets, which are comprised of personal property, real property, and intangible assets. We used a combination of the Income, the Market approach, and the Cost (cost to

create) approach to estimate the fair value of our long-lived assets. Our personal property assets consist of laser manufacturing and assembly equipment, semiconductor tools, laboratory and test equipment, furniture and fixtures and computer hardware and software. We used the Cost Approach (with support from the Market Approach) to estimate the fair value of our personal property, taking into consideration the physical deterioration, functional obsolescence and economic obsolescence of our personal property assets. Our real property assets consist of land and buildings, land rights (ground leased) and ROU assets. In determining the fair value of our real property assets, we used a combination of the Income, Market (sales comparison) and Cost approaches. We considered historical transaction information, current market conditions, operating performance, forecast growth and market-derived rates of return in our real property determination of fair value. The fair value of our ROU assets was determined using the Income approach by considering offmarket components of the associated ROU leases. Our intangible assets consist of technology and customer relationship assets, and we used the Income approach to estimate the fair value of our intangible assets. We identified cash flows associated with each intangible asset, which were discounted at an after-tax rate of return appropriate for the risk profile of each intangible asset.

For our annual impairment test in fiscal 2020, for our OLS reporting unit we conducted a qualitative assessment of the goodwill during the fourth quarter using the opening balance sheet as of the first day of the fourth quarter and concluded that it was more likely than not that the fair value of the reporting unit exceeded its carrying amounts. In assessing the qualitative factors, we considered the impact of these key factors: macroeconomic conditions, fluctuations in foreign currency, market and industry conditions, our operating and competitive environment, regulatory and political developments, the overall financial performance of our reporting units including cost factors and budgeted-to-actual revenue results. We also considered our market capitalization, stock price performance and the significant excess calculated in the second quarter of fiscal 2020 between estimated fair value and the carrying value of OLS. Based on our assessment, goodwill in the OLS reporting unit was not impaired as of the first day of the fourth quarter of fiscal 2020. As such, it was not necessary to perform the goodwill impairment test in the fourth quarter of fiscal 2020. There is no goodwill in the ILS reporting unit due to the impairment of all goodwill of the ILS reporting unit in the second quarter of fiscal 2020.

At October 3, 2020, we had \$101.3 million of goodwill, \$21.8 million of purchased intangible assets and \$245.7 million of property and equipment on our consolidated balance sheet.

Inventory Valuation

We record our inventory at the lower of cost (computed on a first-in, first-out basis) or net realizable value. We write-down our inventory to its estimated market value based on assumptions about future demand and market conditions. Inventory write-downs are generally recorded within guidelines set by management when the inventory for a device exceeds 12 months of its demand or when management has deemed parts are no longer active or useful. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required which could materially affect our future results of operations. Due to rapidly changing forecasts and orders, additional write-downs for excess or obsolete inventory, while not currently expected, could be required in the future. In the event that alternative future uses of fully written down inventories are identified, we may experience better than normal profit margins when such inventory is sold. Differences between actual results and previous estimates of excess and obsolete inventory could materially affect our future results of operations. We write-down our demo inventory by amortizing the cost of demo inventory over periods ranging from 24 to 36 months after such inventory is placed in service.

Warranty Reserves

We provide warranties on the majority of our product sales and allowances for estimated warranty costs are recorded during the period of sale. The determination of such allowances requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. The weighted average warranty period covered is approximately 15 to 18 months. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to cost of sales may be required in future periods.

Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves us estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets.

We record a valuation allowance to reduce our deferred tax assets to an amount that more likely than not will be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to the allowance for the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax asset in the future, an adjustment to the valuation allowance for the deferred tax asset would be charged to income in the period such determination was made.

During fiscal 2020, we increased our valuation allowance on deferred tax assets by \$16.2 million to \$57.7 million, primarily due to the net operating losses generated from certain foreign entities and California research and development tax credits, which are not expected to be recognized. As of October 3, 2020, we had U.S. federal deferred tax assets related to research and development credits and other tax attributes that can be used to offset federal taxable income in future periods. These credit carryforwards will expire if they are not used within certain time periods. Management determined that there is sufficient positive evidence to conclude that it is more likely than not sufficient taxable income will exist in the future allowing us to recognize these deferred tax assets.

We historically asserted our intention to indefinitely reinvest foreign earnings. As a result of the enactment of the Tax Act and certain foreign tax law changes, we no longer consider foreign earnings to be indefinitely reinvested in our foreign subsidiaries. As a result of this change in assertion, we recorded a \$16.1 million tax expense against our foreign earnings that are not indefinitely reinvested as of fiscal 2020. This is mainly related to foreign withholding taxes and state income taxes. We have not recognized any deferred taxes for outside basis differences in foreign subsidiaries.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk disclosures

We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.

Interest rate sensitivity

A portion of our investment portfolio is composed of fixed income securities. These securities are subject to interest rate risk and will fall in value if market interest rates increase. If interest rates were to increase immediately (whether due to changes in overall market rates or credit worthiness of the issuers of our individual securities) and uniformly by 10% from levels at fiscal 2020 year-end, the fair value of the portfolio, based on quoted market prices in active markets involving similar assets, would decline by an immaterial amount due to their short-term maturities. We have the ability to generally hold our fixed income investments until maturity and therefore we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our securities portfolio. If necessary, we may sell short-term investments prior to maturity to meet our liquidity needs.

At each of fiscal 2020 and 2019 year-ends, the fair value of our available-for-sale debt securities was \$35.3 million and \$0.1 million, respectively, all of which was classified as short-term investments. Gross unrealized gains and losses on available-for-sale debt securities were \$36,000 and \$(1,000), respectively, at fiscal 2020 year-end. There were no gross unrealized gains and losses on available-for-sale debt securities at fiscal 2019 year-end.

We are exposed to market risks related to fluctuations in floating interest rates related to our Euro Term Loan. As of October 3, 2020, we owed \$419.8 million on this loan, which had an interest rate of 3.0% as of October 3, 2020. We performed a sensitivity analysis on the outstanding portion of our debt obligation as of October 3, 2020. Should the current average interest rate increase or decrease by 10%, the resulting annual increase or decrease to interest expense would be approximately \$1.2 million as of October 3, 2020.

Foreign currency exchange risk

We maintain operations in various countries outside of the United States and have foreign subsidiaries that manufacture and sell our products in various global markets. The majority of our sales are transacted in U.S. Dollars. However, we do generate revenues in other currencies, primarily the Euro, the Japanese Yen, the South Korean Won, the Singapore Dollar and the Chinese Renminbi. Additionally, we have operations in different countries around the world with costs incurred in the foregoing currencies and other local currencies, such as British Pound Sterling, Malaysian Ringgit, Swiss Franc, Taiwan Dollar, Swedish Krona, Canadian Dollar and Vietnamese Dong. As a result, our earnings, cash flows and cash balances are exposed to fluctuations in foreign currency exchange rates. For example, because of our significant manufacturing operations in Europe and resulting expenses and costs, a weakening Euro is advantageous and a strengthening Euro is disadvantageous to our financial results. We attempt to limit these exposures through financial market instruments. We utilize derivative instruments, primarily forward contracts with maturities of two months or less, to manage our exposure associated with net asset and liability positions denominated in foreign currencies. Gains and losses on the forward contracts are mitigated by gains and losses on the underlying instruments. We do not use derivative financial instruments for trading purposes.

We do not anticipate any material adverse effect on our consolidated financial position, results of operations or cash flows resulting from the use of these instruments. There can be no assurance that these strategies will be effective or that transaction losses can be minimized or forecasted accurately. While we model currency valuations and fluctuations, these may not ultimately be accurate. If a financial counterparty to any of our hedging arrangements experiences financial difficulties or is otherwise unable to honor the terms of the foreign currency hedge, we may experience material financial losses. In the current economic environment, the risk of failure of a financial party remains high.

A hypothetical 10% change in foreign currency rates on our forward contracts would not have a material impact on our results of operations, cash flows or financial position. For example, a 10% change in the Euro as of October 3, 2020 would amount to less than a 0.2% change on our consolidated balance sheet.

At October 3, 2020, approximately \$349.7 million of our cash, cash equivalents and short-term investments were held outside the U.S. in certain of our foreign operations, \$334.3 million of which was denominated in currencies other than the U.S. Dollar.

See Note 7, "Derivative Instruments and Hedging Activities" in our Notes to Consolidated Financial Statements under Item 8 of this annual report for further discussion of our derivatives and hedging activities.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

The following Consolidated Financial Statements of Coherent, Inc. and its subsidiaries are filed as part of this annual report on Form 10-K:	
Report of Independent Registered Public Accounting Firm	78
Consolidated Balance Sheets – October 3, 2020 and September 28, 2019	80
Consolidated Statements of Operations – Years ended October 3, 2020, September 28, 2019, and September 29, 2018	81
Consolidated Statements of Comprehensive Income (Loss) – Years ended October 3, 2020, September 28, 2019, and September 29, 2018	82
Consolidated Statements of Stockholders' Equity – Years ended October 3, 2020, September 28, 2019, and September 29, 2018	83
Consolidated Statements of Cash Flows – Years ended October 3, 2020, September 28, 2019, and September 29, 2018	84
Notes to Consolidated Financial Statements	86
Quarterly Financial Information (Unaudited)	132

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Coherent, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Coherent, Inc. and subsidiaries (the "Company") as of October 3, 2020 and September 28, 2019, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended October 3, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of October 3, 2020 and September 28, 2019, and the results of its operations and its cash flows for each of the three years in the period ended October 3, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 October 3, 2020, based on criteria established in *Internal Control* — *Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 1, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 2 to the financial statements, the Company changed its method of accounting for leases in fiscal year 2020 due to adoption of Financial Accounting Standards Board ("FASB") Topic 842, *Leases*.

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 critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Equipment, Furniture, and Fixtures — Industrial Lasers & Systems Asset Group — Refer to Notes 2 and 8 to the financial statements

Critical Audit Matter Description

The Company evaluates long-lived assets for impairment when events or changes in circumstances exist that may indicate that the carrying amount of the asset group are no longer recoverable. Events that result

in an impairment review include plans to discontinue a product line or a significant decrease in the operating results. When such an indicator occurs, the Company evaluates the asset group for impairment by comparing the undiscounted future cash flows expected to be generated by the asset group to the asset group's carrying amount. If the carrying amount of an asset group exceeds the estimated undiscounted future cash flows, an analysis is performed to estimate the fair value of the individual assets within the asset group. An impairment is recorded if the fair value of an individual asset is less than the carrying amount. During the year ended October 3, 2020, an impairment loss of \$47 million was recognized on machinery and equipment assets within the ILS asset group. We identified the valuation of machinery and equipment assets within the ILS asset group as a critical audit matter because there are significant judgments made by management when determining the fair value of the machinery and equipment assets. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists, when performing audit procedures to evaluate the reasonableness of the Company's estimates and assumptions related to asset category selection, fair market value trend factors, assumed physical deterioration, and orderly liquidation value percentages.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures included performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included the following, among others:

- We tested the effectiveness of internal controls over management's asset group impairment assessment, including those over the asset category selection, fair market value trend factors, assumed physical deterioration, and orderly liquidation value percentages.
- With the assistance of our fair value specialists, we evaluated the appropriateness of management's valuation methodologies and the reasonableness of the key assumptions by:
 - testing the source information underlying the determination of the asset category selection, fair market value trend factors, and assumed physical deterioration; and
 - developing a range of independent estimates and comparing the orderly liquidation values selected by management

/s/ DELOITTE & TOUCHE LLP

San Jose, California

December 1, 2020

We have served as the Company's auditor since 1976.

CONSOLIDATED BALANCE SHEETS

(In thousands, except par value)

	October 3, 2020	September 28, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 440,258	\$ 305,833
Restricted cash	765	792
Short-term investments	35,346	120
Accounts receivable - net of allowances of \$7,630 and \$8,690, respectively	220,289	267,553
Inventories	426,756	442,530
Prepaid expenses and other assets	88,250	77,993
Total current assets	1,211,664	1,094,821
Property and equipment, net	245,678	323,434
Goodwill	101,317	427,101
Intangible assets, net	21,765	84,813
Non-current restricted cash	4,497	12,036
Other assets	242,575	140,964
Total assets	\$1,827,496	\$2,083,169
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings and current-portion of long-term obligations	\$ 16,817	\$ 14,863
Accounts payable	60,225	51,531
Income taxes payable	6,861	6,185
Other current liabilities	184,155	167,735
Total current liabilities	268,058	240,314
Long-term obligations	411,140	392,238
Other long-term liabilities	221,074	165,881
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Common stock, Authorized – 500,000 shares, par value \$.01 per share:		
Outstanding – 24,257 shares and 23,982 shares, respectively	241	238
Additional paid-in capital	80,275	34,320
Accumulated other comprehensive loss	(25,667)	(36,336)
Retained earnings	872,375	1,286,514
Total stockholders' equity	927,224	1,284,736
Total liabilities and stockholders' equity	\$1,827,496	\$2,083,169

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

			Y	ear Ended		
	Oc	ctober 3, 2020	Sep	otember 28, 2019	Se	ptember 29, 2018
Net sales	\$1,	228,999	\$1	,430,640	\$1	,902,573
Cost of sales		818,125		944,175	_1	,071,882
Gross profit		410,874		486,465		830,691
Operating expenses:						
Research and development		115,578		117,353		132,586
Selling, general and administrative		270,464		272,257		293,632
Goodwill and other impairment charges		451,025				766
Amortization of intangible assets		3,987		13,760		10,690
Total operating expenses	:	841,054		403,370		437,674
Income (loss) from operations	(-	430,180)		83,095		393,017
Other income (expense):						
Interest income		1,053		1,119		1,571
Interest expense		(17,037)		(19,122)		(25,847)
Other – net		3,441		(5,044)	_	(7,186)
Total other expense, net		(12,543)		(23,047)		(31,462)
Income (loss) from continuing operations before income taxes	(4	442,723)		60,048		361,555
Provision for (benefit from) income taxes		(28,584)		6,223		114,195
Net income (loss) from continuing operations	(-	414,139)		53,825		247,360
Loss from discontinued operations, net of income taxes		_				(2)
Net income (loss)	\$ (414,139)	\$	53,825	\$	247,358
Basic net income (loss) per share:						
Income (loss) per share from continuing operations	\$	(17.18)	\$	2.23	\$	10.07
Loss per share from discontinued operations, net of income						
taxes	\$	_	\$	_	\$	_
Basic net income (loss) per share	\$	(17.18)	\$	2.23	\$	10.07
Diluted net income (loss) per share:						
Income (loss) per share from continuing operations	\$	(17.18)	\$	2.22	\$	9.95
Loss per share from discontinued operations, net of income	Ø.		¢.		Φ	
taxes	\$	(17.10)	\$	2 22	\$	0.05
Diluted net income (loss) per share	\$	(17.18)	\$	2.22	\$	9.95
•		24 105		24 119		24 572
Basic		24,105 24,105		24,118 24,279		24,572
Diluted		24,105		24,219		24,851

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (In thousands)

Year Ended		
October 3, 2020	September 28, 2019	September 29, 2018
\$(414,139)	\$ 53,825	\$247,358
9,248	(32,609)	(18,065)
1	_	(4)
1,420	(6,560)	996
10,669	(39,169)	(17,073)
\$(403,470)	\$ 14,656	\$230,285
	2020 \$(414,139) 9,248 1 1,420 10,669	October 3, 2020 September 28, 2019 \$(414,139) \$ 53,825 9,248 (32,609) 1 — 1,420 (6,560) 10,669 (39,169)

⁽¹⁾ Reclassification adjustments were not significant during fiscal 2020, 2019, and 2018.

⁽²⁾ Tax expenses (benefits) of \$2,731, \$(5,161), and \$0 were provided on translation adjustments during fiscal 2020, 2019, and 2018, respectively.

⁽³⁾ Tax benefits of \$0, \$0, and \$(2) were provided on changes in unrealized losses on available-for-sale securities during fiscal 2020, 2019, and 2018, respectively.

⁽⁴⁾ Tax expenses (benefits) of \$713, \$(2,371), and \$202 were provided on changes in defined benefit pension plans during fiscal 2020, 2019, and 2018, respectively.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Three Years in the Period Ended October 3, 2020 (In thousands)

	Common Stock Shares	Common Stock Par Value	Add. Paid-in Capital	Accum. Other Comp. Income (Loss)	Retained Earnings	Total
Balances, September 30, 2017	24,631	\$245	\$171,403	\$ 19,906	\$ 971,710	\$1,163,264
Common stock issued under stock plans, net of shares withheld for employee taxes	243	3	(25,749)	_	_	(25,746)
Repurchase of common stock	(575)	(6)	(99,994)		_	(100,000)
Cumulative effect of change in accounting principle	_	_	_	_	13,621	13,621
Stock-based compensation	_		33,040	_	_	33,040
Net income	_	_	_		247,358	247,358
Other comprehensive loss, net of tax				(17,073)		(17,073)
Balances, September 29, 2018	24,299	242	78,700	2,833	1,232,689	1,314,464
Common stock issued under stock plans, net of shares withheld for employee taxes	287	2	(3,370)	_	_	(3,368)
Repurchases of common stock	(604)	(6)	(77,404)		_	(77,410)
Stock-based compensation	_	_	36,394		_	36,394
Net income	_	_	_		53,825	53,825
Other comprehensive loss, net of tax				(39,169)		(39,169)
Balances, September 28, 2019	23,982	238	34,320	(36,336)	1,286,514	1,284,736
Common stock issued under stock plans, net of shares withheld for employee taxes	275	3	(190)	_	_	(187)
Stock-based compensation	_	_	46,145		_	46,145
Net loss	_	_	_		(414,139)	(414,139)
Other comprehensive income, net of tax		_	_	10,669	_	10,669
Balances, October 3, 2020	24,257	<u>\$241</u>	\$ 80,275	\$(25,667)	\$ 872,375	\$ 927,224

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended		
	October 3, 2020	September 28, 2019	September 29, 2018
Cash flows from operating activities:			
Net income (loss)	\$(414,139)	\$ 53,825	\$247,358
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	46,705	54,925	53,342
Amortization of intangible assets	30,128	61,460	60,039
Impairment of goodwill	327,203	_	
Impairment of long-lived assets	121,350	_	766
Impairment of investment	2,472		
Deferred income taxes	(24,471)	(14,930)	16,607
Amortization of debt issuance cost	3,321	4,647	9,565
Stock-based compensation	44,787	36,466	32,738
Non-cash restructuring charges	2,194	12,609	1,246
Amortization of right of use assets	16,033		
Non-cash pension impact	2,134	(8,931)	980
Other non-cash expense (gain)	(2,571)	421	559
Changes in assets and liabilities, net of effect of acquisitions:			
Accounts receivable	53,104	82,078	(47,020)
Inventories	28,464	17,805	(78,123)
Prepaid expenses and other assets	(2,631)	14,074	(6,695)
Other long-term assets	(2,733)	(549)	(7,692)
Accounts payable	8,187	(15,160)	(9,736)
Income taxes payable/receivable	(25,024)	(119,929)	474
Operating lease liabilities	(15,964)		
Other current liabilities	(985)	(13,155)	(42,820)
Other long-term liabilities	9,343	15,745	4,523
Net cash provided by operating activities	206,907	181,401	236,111
Cash flows from investing activities:			
Purchases of property and equipment	(64,919)	(83,283)	(90,757)
Proceeds from dispositions of property and equipment	21,926	5,294	4,405
Purchases of available-for-sale securities	(77,359)	(11,552)	(54,442)
Proceeds from sales and maturities of available-for-sale			
securities	42,168	11,552	86,786
Acquisition of businesses, net of cash acquired	_	(18,881)	(45,448)
Investment at cost	_	(3,423)	_
Proceeds from sale of discontinued operation	_	_	25,000
Proceeds from sale of other entities	_	_	6,250
Other			470
Net cash used in investing activities	(78,184)	(100,293)	(67,736)

CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued) (In thousands)

	Year Ended			
	October 3, 2020	September 28, 2019	September 29, 2018	
Cash flows from financing activities:				
Short-term borrowings	\$ 12,695	\$ 119,594	\$ 89,092	
Repayments of short-term borrowings	(14,474)	(111,794)	(90,751)	
Repayments of long-term borrowings	(7,920)	(7,537)	(171,593)	
Issuance of common stock under employee stock option and purchase plans	13,362	11,811	10,574	
Repurchase of common stock		(77,410)	(100,000)	
Net settlement of restricted common stock	(13,549)	(15,179)	(36,320)	
Net cash used in financing activities	(9,886)	(80,515)	(298,998)	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	8,022	(5,977)	(2,419)	
Net increase (decrease) in cash, cash equivalents and restricted cash	126,859	(5,384)	(133,042)	
Cash, cash equivalents and restricted cash, beginning of year	318,661	324,045	457,087	
Cash, cash equivalents and restricted cash, end of year	\$445,520	\$ 318,661	\$ 324,045	
Supplemental disclosure of cash flow information:				
Cash paid during the year for:				
Interest	\$ 13,716	\$ 14,475	\$ 16,282	
Income taxes	\$ 33,617	\$ 156,650	\$ 101,924	
Cash received during the year for:				
Income taxes	\$ 10,933	\$ 23,416	\$ 5,203	
Noncash investing and financing activities:				
Unpaid property and equipment purchases	\$ 2,896	\$ 4,406	\$ 6,176	

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.

	October 3, 2020	September 28, 2019	September 29, 2018
Cash and cash equivalents	\$440,258	\$305,833	\$310,495
Restricted cash, current	765	792	858
Restricted cash, non-current	4,497	12,036	12,692
Total cash, cash equivalents, and restricted cash shown in the consolidated statement of cash flows	\$445,520	\$318,661	\$324,045

(concluded)

COHERENT, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

Founded in 1966, Coherent, Inc. provides lasers, laser-based technologies and laser-based system solutions in a broad range of scientific, commercial, and industrial research applications. Coherent designs, manufactures, services, and markets lasers and related accessories for a diverse group of customers. Headquartered in Santa Clara, California, the Company has worldwide operations including research and development, manufacturing, sales, service, and support capabilities.

2. SIGNIFICANT ACCOUNTING POLICIES

Fiscal Year

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2020, 2019, and 2018 ended on October 3, 2020, September 28, 2019, and September 29, 2018, respectively, and are referred to in these financial statements as fiscal 2020, fiscal 2019, and fiscal 2018 for convenience. Fiscal 2020 included 53 weeks and fiscal 2019 and 2018 each included 52 weeks. The fiscal years of several of our international subsidiaries end on September 30. Accordingly, the financial statements of these subsidiaries as of that date and for the years then ended have been used for our consolidated financial statements. Management believes that the impact of the use of different year-ends is immaterial to our consolidated financial statements taken as a whole.

Use of Estimates

The preparation of consolidated financial statements in conformity with Generally Accepted Accounting Principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Basis of Presentation

The consolidated financial statements include the accounts of Coherent, Inc. and its direct and indirect subsidiaries (collectively, the "Company", "we", "our", "us" or "Coherent"). Intercompany balances and transactions have been eliminated.

Business Combinations

We include the results of operations of the businesses that we acquire as of the respective dates of acquisition. We allocate the fair value of the purchase price of our business acquisitions to the tangible assets acquired, liabilities assumed, and intangible assets acquired, based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill.

On March 8, 2018, we acquired privately held O.R. Lasertechnologie GmbH and certain assets of its U.S.-based affiliate (collectively "OR Laser"). On October 5, 2018, we acquired privately held Ondax, Inc. ("Ondax"). The significant accounting policies of OR Laser and Ondax have been aligned to conform to those of Coherent, and the consolidated financial statements include the results of OR Laser and Ondax as of their acquisition dates.

Fair Value of Financial Instruments

The carrying amounts of certain of our financial instruments including accounts receivable, accounts payable, and accrued liabilities approximate fair value due to their short maturities. Short-term investments are comprised of available-for-sale securities, which are carried at fair value. Other non-current assets include trading securities and life insurance contracts related to our deferred compensation plans; trading securities

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

are carried at fair value and life insurance contracts are carried at cash surrender values, which due to their ability to be converted to cash at that amount, approximate their fair values. Foreign exchange contracts are stated at fair value based on prevailing financial market information. Short-term and long-term debt is carried at amortized cost, which approximates its fair value based on borrowing rates currently available to us for loans with similar terms.

Cash Equivalents

All highly liquid investments with maturities of three months or less at the time of purchase are classified as cash equivalents. At fiscal 2020 year-end, cash and cash equivalents included cash, money market funds, and time deposits.

Concentration of Credit Risk

Financial instruments that may potentially subject us to concentrations of credit risk consist principally of cash equivalents, short-term investments, and accounts receivable. At fiscal 2020 year-end, the majority of our short-term investments were in U.S. Treasury and agency obligations. Cash equivalents and short-term investments are maintained with several financial institutions and may exceed the amount of insurance provided on such balances. At October 3, 2020, we held cash and cash equivalents and short-term investments outside the U.S. in certain of our foreign operations totaling approximately \$349.7 million, \$334.3 million of which was denominated in currencies other than the U.S. Dollar. The majority of our accounts receivable are derived from sales to customers for commercial applications. We perform ongoing credit evaluations of our customers' financial condition and limit the amount of credit extended when deemed necessary but generally require no collateral. In certain instances, we may require customers to issue a letter of credit. We maintain reserves for potential credit losses. Our products are broadly distributed and there was one customer who accounted for 23.9% and 28.6% of accounts receivable at fiscal 2020 and fiscal 2019 year-end, respectively.

Derivative Financial Instruments

Our primary objective for holding derivative financial instruments is to manage currency exchange rate risk. Principal currencies hedged include the Euro, South Korean Won, Japanese Yen, Chinese Renminbi, Singapore Dollar, British Pound, Malaysian Ringgit, Swiss Franc, Canadian Dollar, Swedish Krona, Taiwan Dollar, and Vietnamese Dong. Our derivative financial instruments are recorded at fair value, on a gross basis, and are included in other current assets and other current liabilities.

Our accounting policies for derivative financial instruments are based on whether they meet the criteria for designation as a cash flow hedge. If we have any that meet this criteria, changes in the fair value of these cash flow hedges that are highly effective are recorded in accumulated other comprehensive income and reclassified into earnings in the same line item on the consolidated statements of operations as the impact of the hedged transaction during the period in which the hedged transaction affects earnings. The ineffective portion of cash flow hedges are recognized immediately in other income and expenses. Derivatives that we designate as cash flow hedges are classified in the consolidated statements of cash flows in the same section as the underlying item, primarily within cash flows from operating activities. The changes in fair value of derivative instruments that are not designated as hedges are recognized immediately in other income (expense).

We formally document all relationships between hedging instruments and hedged items, as well as the risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as cash-flow hedges to specific forecasted transactions. We also assess, both at the hedge's inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in cash flows of the hedged items.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Accounts Receivable Allowances

Accounts receivable allowances reflect our best estimate of probable losses inherent in our accounts receivable balances, including both losses for uncollectible accounts receivable and sales returns. We regularly review allowances by considering factors such as historical experience, credit quality, the age of the accounts receivable balances, and current economic conditions that may affect a customer's ability to pay.

Activity in accounts receivable allowance is as follows (in thousands):

	Fiscal		
	2020	2019	2018
Beginning balance	\$ 8,690	\$ 4,568	\$ 6,890
Additions charged to expenses	2,630	5,210	1,980
Accruals related to acquisitions	_	_	37
Deductions from reserves	(3,690)	(1,088)	(4,339)
Ending balance	\$ 7,630	\$ 8,690	\$ 4,568

Fignal

Inventories

Inventories are stated at the lower of cost (first-in, first-out or weighted average cost) or net realizable value. Inventories are as follows (in thousands):

	Fiscal year-end	
	2020	2019
Purchased parts and assemblies	\$116,957	\$134,298
Work-in-process	173,871	174,550
Finished goods	135,928	133,682
Total inventories	\$426,756	\$442,530

Property and Equipment

Property and equipment are stated at cost and are depreciated or amortized using the straight-line method. Cost, accumulated depreciation and amortization, and estimated useful lives are as follows (dollars in thousands):

	Fiscal year-end		
	2020	2019	Useful Life
Land	\$ 19,576	\$ 19,490	
Buildings and improvements	169,748	173,333	5-40 years
Equipment, furniture and fixtures	364,376	389,225	3-10 years
Leasehold improvements	72,474	94,878	shorter of asset life or lease term
	626,174	676,926	
Accumulated depreciation and amortization	(380,496)	(353,492)	
Property and equipment, net	\$ 245,678	\$ 323,434	

In fiscal 2020, we completed a sale-leaseback transaction for our Hamburg, Germany facility. See Note 11, "Leases" for further discussion.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Asset Retirement Obligations

The fair value (the present value of estimated cash flows) of a liability for an asset retirement obligation is recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The fair value of the liability is added to the carrying amount of the associated asset and this additional carrying amount is depreciated over the life of the asset. All of our existing asset retirement obligations are associated with commitments to return the property to its original condition upon lease termination at various sites and costs to clean up and dispose of certain fixed assets at our Sunnyvale, California site. We estimated that as of fiscal 2020 year-end, gross expected future cash flows of \$6.8 million would be required to fulfill these obligations.

The following table reconciles changes in our asset retirement liability for fiscal 2020 and 2019 (in thousands):

Asset retirement liability as of September 29, 2018	\$ 5,802
Reduction to asset retirement obligations	(1,155)
Adjustments and additions to asset retirement obligations recognized	390
Accretion recognized	127
Changes due to foreign currency exchange	(90)
Asset retirement liability as of September 28, 2019	5,074
Reduction to asset retirement obligations	(32)
Adjustments and additions to asset retirement obligations recognized	813
Accretion recognized	161
Changes due to foreign currency exchange	163
Asset retirement liability as of October 3, 2020	\$ 6,179

At October 3, 2020, \$0.3 million and \$5.9 million of the asset retirement liability were included in Other current liabilities and Other long-term liabilities, respectively, on our consolidated balance sheets. At September 28, 2019, \$0.1 million and \$4.9 million of the asset retirement liability were included in Other current liabilities and Other long-term liabilities, respectively, on our consolidated balance sheets.

Long-lived Assets

We evaluate the carrying value of long-lived assets, including intangible assets, whenever events or changes in business circumstances or our planned use of long-lived assets indicate that their carrying amounts may not be fully recoverable or that their useful lives are no longer appropriate. Reviews are performed to determine whether the carrying values of long-lived assets are impaired based on a comparison to the undiscounted expected future net cash flows. If the comparison indicates that impairment exists, long-lived assets that are classified as held and used are written down to their respective fair values. When long-lived assets are classified as held for sale, they are written down to their respective fair values less costs to sell. Significant management judgment is required in the forecast of future operating results that is used in the preparation of expected undiscounted cash flows. For fiscal 2020, we recorded non-cash pre-tax charges in the quarter ended April 4, 2020 related to the intangible assets, property, plant and equipment, and right-of-use ("ROU") assets of the ILS reporting unit of \$33.9 million, \$85.6 million, and \$1.8 million, respectively (See Note 8, "Goodwill and Intangible Assets").

Goodwill

Goodwill is tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired (See Note 8, "Goodwill and Intangible Assets"). Based on the estimated

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

fair value of the ILS reporting unit, in the quarter ended April 4, 2020, we recorded a non-cash pre-tax charge related to the ILS reporting unit of \$327.2 million, reducing the goodwill balance of the reporting unit to zero. In testing for impairment, we have the option to first assess qualitative factors to determine whether it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. Moreover, an entity can bypass the qualitative assessment for any reporting unit in any period and proceed directly to the impairment test, and then resume performing the qualitative assessment in any subsequent period. In our fiscal 2020 annual testing, for our OLS reporting unit we conducted a qualitative assessment of the goodwill during the fourth quarter using the opening balance sheet as of the first day of the fourth quarter and concluded that it was more likely than not that the fair value of the reporting unit exceeded its carrying amounts. Based on our assessment, goodwill in the OLS reporting unit was not impaired as of the first day of the fourth quarter of fiscal 2020. As such, it was not necessary to perform the goodwill impairment test in the fourth quarter of fiscal 2020. There is no goodwill in the ILS reporting unit due to the impairment of all goodwill of the ILS reporting unit in the second quarter of fiscal 2020.

Intangible Assets

Intangible assets, including acquired existing technology, customer relationships and production know-how are amortized on a straight-line basis over their estimated useful lives, currently 4 year to 15 years (See Note 8, "Goodwill and Intangible Assets").

Warranty Reserves

We provide warranties on the majority of our product sales and reserves for estimated warranty costs are recorded during the period of sale. The determination of such reserves requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. The weighted average warranty period covered is approximately 15 months to 18 months. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to cost of sales may be required in future periods.

Components of the reserve for warranty costs during fiscal 2020, 2019, and 2018 were as follows (in thousands):

	Fiscal		
	2020	2019	2018
Beginning balance	\$ 36,460	\$ 40,220	\$ 36,149
Additions related to current period sales	37,788	52,271	58,865
Warranty costs incurred in the current period	(40,724)	(54,538)	(51,935)
Accruals resulting from acquisitions	_	21	179
Adjustments to accruals related to foreign exchange and other .	1,508	(1,514)	(3,038)
Ending balance	\$ 35,032	\$ 36,460	\$ 40,220

Loss Contingencies

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. We consider the likelihood of loss or impairment of an asset, or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss, in determining loss contingencies. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of loss can be reasonably estimated. If we determine that a loss is possible and the range of the loss can be reasonably determined, then we disclose the range of the possible loss. We regularly

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

evaluate current information available to us to determine whether an accrual is required, an accrual should be adjusted or a range of possible loss should be disclosed.

Revenue Recognition

Effective September 30, 2018, we adopted ASU 2014-09, Revenue from Contracts with Customers ("ASC 606"), using the modified retrospective transition method applied to contracts that were not completed as of September 29, 2018. Revenue for the reporting periods after September 30, 2018 are presented under ASC 606, while prior period amounts are reported in accordance with our historical accounting under ASC 605, Revenue Recognition ("ASC 605"). There was no impact on the opening accumulated retained earnings, revenues, costs, deferred income, customer deposits or other balances as of September 30, 2018 due to the adoption of ASC 606.

Under ASC 606, we determine revenue recognition by applying the following five-step approach:

- Step 1 Identification of the contract, or contracts, with a customer;
- Step 2 Identification of the performance obligations in the contract;
- Step 3 Determination of the transaction price;
- Step 4 Allocation of the transaction price to the performance obligations in the contract; and
- Step 5 Recognition of revenue when, or as, we satisfy each performance obligation.

Contracts and customer purchase orders, which in some cases are governed by master sales agreements, are generally used to determine the existence of an arrangement. In addition, shipping documents and customer acceptance, if applicable, are used to verify delivery and transfer of control. Performance obligations are identified based on the products or services that will be transferred to the customer that are considered distinct. Being distinct is defined as products or services that the customer can benefit from either on its own or together with other resources that are readily available from third parties or from us, and by the product or service being separately identifiable from other promises in the contract. We assess our ability to collect from our customers based primarily on the creditworthiness and past payment history of each customer. Revenue from all sales are recognized at the transaction price. The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring goods or services to the customer adjusted for estimated variable consideration, if any. The consideration associated with customer contracts is generally fixed. Variable consideration includes discounts, rebates, credits and incentives, or other similar items. The amount of consideration that can vary is not a substantial portion of the total consideration. Variable consideration estimates are re-assessed at each reporting period until a final outcome is determined. Changes to the original transaction price due to a change in estimated variable consideration are calculated on a retrospective basis, with the adjustment recorded in the period in which the change occurs.

Sales to customers are generally not subject to any price protection or return rights. Accordingly, upon application of steps one through five above, product revenue is recognized upon shipment and transfer of control. The majority of products and services offered by us have readily observable selling prices. As a part of our stand-alone selling price policy, we review product pricing on a periodic basis to identify any significant changes and revise our expected selling price assumptions as appropriate.

We record taxes collected on revenue-producing activities on a net basis.

Revenue recognition at a point in time

Revenues recognized at a point in time consist primarily of product, installation and training. The majority of our sales are made to original equipment manufacturers ("OEMs"), distributors, representatives

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

and end-users. Sales made to customers generally do not require installation of the products by us and are not subject to other post-delivery obligations. Sales to end-users in the scientific market typically require installation by us and, thus, involve post-delivery obligations; however, our post-delivery installation obligations are not essential to the functionality of our products and represent a separate performance obligation. We recognize revenue for these sales following the transfer of control of such products to the customer, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts. In those instances that we have agreed to perform installation or provide training, we defer revenue related to installation or training until these services have been rendered.

Our sales to distributors, representatives and end-user customers typically do not have customer acceptance provisions and only certain of our sales to OEM customers and integrators have customer acceptance provisions. Customer acceptance is generally limited to performance under our published product specifications. For the few product sales that have customer acceptance provisions because of more advanced performance than our published specifications, the revenue is recognized when the control transfers or the revenue is deferred until customer acceptance occurs.

Revenue recognition over time

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. These contracts are evaluated to determine if the multiple promises are separate performance obligations. Once we determine the performance obligations, we then determine the transaction price, which includes estimating the amount of variable consideration, if any. We then allocate the transaction price to each performance obligation in the contract based on a relative stand-alone selling price charged separately to customers. Extended warranties are sold separately from products and represent a distinct performance obligation. Revenue related to the performance obligation for extended warranties is recognized over time as the customer simultaneously receives and consumes the benefits provided by us.

Customized products, for which we have an enforceable right to payment for performance completed to date, are recorded over time. We use the output method to recognize revenue over time for such contracts as it best depicts the satisfaction of our performance obligations.

Shipping and handling costs

We record costs related to shipping and handling of net sales in cost of sales for all periods presented. Shipping and handling fees billed to customers are included in net sales. Customs duties billed to customers are recorded in cost of sales.

Warranty

We provide warranties on the majority of our product sales and reserves for estimated warranty costs are recorded during the period of sale. These standard warranties are assurance type warranties and do not offer any services beyond the assurance that the product will continue working as specified. Therefore, these warranties are not considered separate performance obligations in the arrangement. Instead, the expected cost of the warranty is accrued as an expense. The determination of such reserves requires us to make estimates of product return rates and expected costs to repair or replace the products under warranty. We currently establish warranty reserves based on historical warranty costs for each product line. The weighted average warranty period covered is approximately 15 to 18 months. If actual return rates and/or repair and replacement costs differ significantly from our estimates, adjustments to cost of sales may be required in future periods.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

Costs of obtaining a contract

We recognize the incremental direct costs of obtaining a contract from a customer as an expense, which primarily includes sales commissions. Sales commissions are recorded at a point of time when control of the product transfers or over a period of time when sales commission provided is expected to be recovered through future services. The costs are recorded within selling, general and administrative expense. Costs incurred prior to the transfer of control of the product to the customer and costs to be amortized over a future period are classified as a prepaid asset and are included in prepaid expenses and other assets. Upon adoption of ASC 606, we determined there was an immaterial impact on sales commissions and therefore, we did not record a transition adjustment on adoption. For the fiscal 2020 and 2019, costs of obtaining a contract to be amortized over a future period of \$0.3 million and \$0.1 million were classified as a prepaid asset and are included in prepaid expenses and other assets, respectively.

Payment terms

Our standard payment terms are 30 days but vary by the industry and location of the customer and the products or services offered. The time between invoicing and when payment is due is not significant. As our standard payment terms are less than one year, we have elected the practical expedient under ASC 606-10-32-18 and therefore are not required to assess whether each contract has a significant financing component.

Customer deposits and deferred revenue

When we receive consideration from a customer prior to transferring goods or services under the terms of a sales contract, we record customer deposits or deferred revenue, depending on whether or not the product has shipped to the customer, which are included in other current liabilities or other long-term liabilities when the payment is made or due, whichever is earlier. We recognize deferred revenue as net sales after control of the goods or services has been transferred to the customer and all revenue recognition criteria are met.

Research and Development

Research and development 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 and engineering services are included in research and development expenses as incurred as they do not directly relate to any particular licensee, license agreement or license fee.

We treat third party and government funding of our research and development activity, where we are the primary beneficiary of such work conducted, as a reduction of research and development cost. Research and development reimbursements of \$3.4 million, \$3.8 million, and \$3.2 million were offset against research and development costs in fiscal 2020, 2019, and 2018, respectively.

Foreign Currency Translation

The functional currencies of our foreign subsidiaries are generally their respective local currencies. Accordingly, gains and losses from the translation of the financial statements of the foreign subsidiaries are reported as a separate component of accumulated other comprehensive income ("OCI"). Foreign currency transaction gains and losses are included in earnings.

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Accumulated other comprehensive income (loss) (net of tax) at fiscal 2020 year-end was substantially comprised of accumulated

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

translation adjustments of \$25.1 million and deferred actuarial losses on pension plans of \$0.5 million. Accumulated other comprehensive loss (net of tax) at fiscal 2019 year-end was substantially comprised of accumulated translation adjustments of \$34.4 million and deferred actuarial losses on pension plans of \$2.0 million.

Earnings Per Share

Basic earnings per share is computed based on the weighted average number of shares outstanding during the period, excluding unvested restricted stock. Diluted earnings per share is computed based on the weighted average number of shares outstanding during the period increased by the effect of dilutive employee stock awards, including stock options, restricted stock awards and stock purchase plan contracts, using the treasury stock method.

The following table presents information necessary to calculate basic and diluted earnings per share (in thousands, except per share data):

	Fiscal		
	2020	2019	2018
Weighted average shares outstanding – basic	24,105	24,118	24,572
Dilutive effect of employee stock awards	_	161	279
Weighted average shares outstanding – diluted	24,105	24,279	24,851
Net income (loss) from continuing operations	\$(414,139)	\$53,825	\$247,360
Loss from discontinued operations, net of income taxes			(2)
Net income (loss)	\$(414,139)	\$53,825	\$247,358

For fiscal 2020, all potentially dilutive securities have been excluded from the dilutive share calculation as we reported a net loss. There were 98,103 and 103,547 potentially dilutive securities excluded from the dilutive share calculation for fiscal 2019 and 2018, respectively, as their effect was anti-dilutive.

Stock-Based Compensation

We recognize compensation expense for all share-based payment awards based on the fair value of such awards. We value restricted stock units using the intrinsic value method, which is based on the fair market value price on the grant date. We use a Monte Carlo simulation model to estimate the fair value of performance restricted stock units whose number of units vesting is based on our total shareholder return over the performance period compared to the Russell Index. We value certain performance restricted stock units with vesting based on goals related to free cash flow target amounts units using the intrinsic value method, which is based on the fair market value price on the grant date. We amortize the fair value of stock awards on a straight-line basis over the requisite service periods of the awards, which are generally the vesting periods. See Note 12, "Employee Stock Award and Benefit Plans" for a description of our stock-based employee compensation plans and the assumptions we use to calculate the fair value of stock-based employee compensation.

Income Taxes

As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax provision (benefit) in each of the jurisdictions in which we operate. This process involves us estimating our current income tax provision (benefit) together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

We account for uncertain tax issues pursuant to ASC 740-10 *Income Taxes*, which creates a single model to address accounting for uncertainty in tax positions by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. This standard provides a two-step approach for evaluating tax positions. The first step, recognition, occurs when a company concludes (based solely on the technical aspects of the matter) that a tax position is more likely than not to be sustained upon examination by a taxing authority. The second step, measurement, is only considered after step one has been satisfied and measures any tax benefit at the largest amount that is deemed more likely than not to be realized upon ultimate settlement of the uncertainty. These determinations involve significant judgment by management. Tax positions that fail to qualify for initial recognition are recognized in the first subsequent interim period that they meet the more likely than not standard or when they are resolved through negotiation or litigation with factual interpretation, judgment and certainty. Tax laws and regulations themselves are complex and are subject to change as a result of changes in fiscal policy, changes in legislation, evolution of regulations and court filings. Therefore, the actual liability for U.S. or foreign taxes may be materially different from our estimates, which could result in the need to record additional tax liabilities or potentially to reverse previously recorded tax liabilities.

We record a valuation allowance to reduce our deferred tax assets to an amount that more likely than not will be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to the allowance for the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax asset in the future, an adjustment to the allowance for the deferred tax asset would be charged to income in the period such determination was made.

We historically asserted our intention to indefinitely reinvest foreign earnings. As a result of enactment of the Tax Cuts and Jobs Act (the "Tax Act") and certain foreign tax law changes, we no longer consider foreign earnings to be indefinitely reinvested in our foreign subsidiaries. As a result of this change in assertion, we recorded a \$16.1 million tax expense against our foreign earnings that are not indefinitely reinvested as of fiscal 2020. This is mainly related to foreign withholding taxes and state income taxes. We have not recognized any deferred taxes for outside basis differences in foreign subsidiaries.

Adoption of New Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2019-12, Simplifying the Accounting for Income Taxes. The ASU updates specific areas of ASC 740, Income Taxes, to reduce complexity while maintaining or improving the usefulness of the information provided to users of financial statements. We elected to early adopt ASU 2019-12 in the second quarter of fiscal 2020 with no material impact to our consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. The guidance allows companies to reclassify stranded tax effects resulting from the Tax Act from accumulated other comprehensive income to retained earnings. The guidance also requires certain new disclosures regardless of the election. The amendments in ASU 2018-02 are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. We adopted ASU 2018-02 in the first quarter of fiscal 2020 with no material impact to our consolidated financial statements.

In February 2016, the FASB issued accounting guidance (ASC 842) that modifies lease accounting for lessees to increase transparency and comparability by recording lease assets and liabilities for operating leases and disclosing key information about leasing arrangements. We adopted ASC 842 in the first quarter of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

fiscal 2020 utilizing the optional transition method by applying the new standard to leases existing at the date of initial application and not restating comparative periods. We determine if an arrangement contains a lease at inception for arrangements with an initial term of more than 12 months, and classify it as either finance or operating. We have elected the package of practical expedients which allows us to not reassess 1) whether any expired or existing contracts are or contain leases; 2) the lease classification for any expired or existing leases; and 3) initial direct costs for any existing leases. In addition, we also elected to use the practical expedient allowed in the standard to not separate lease and non-lease components and apply the short-term lease measurement and recognition exemption to all leases shorter than 12 months when calculating the lease liability under ASC 842. The adoption of the standard resulted in the recognition of operating lease assets of \$90.4 million, with corresponding operating lease liabilities of \$93.5 million on our consolidated balance sheet, primarily related to real estate leases. The difference between the operating lease right-of-use assets and operating lease liabilities primarily represents our deferred rent as of adoption. As of the date of adoption, we recognized finance lease assets of \$1.0 million, with corresponding finance lease liabilities of \$0.9 million on our consolidated balance sheet, primarily related to equipment leases.

See Note 11, "Leases" for more information.

Recently Issued Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments and a subsequent amendment, ASU 2018-19 (collectively, Topic 326). Topic 326 requires measurement and recognition of expected credit losses for financial assets held. The new standard will become effective for our fiscal year 2021, which begins on October 4, 2020. We do not expect the standard will have a material impact on our consolidated statements of operations.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA, and the SEC did not or are not believed by management to have a material impact on our present or future consolidated financial statements.

3. REVENUE RECOGNITION

Disaggregation of Revenue

Based on the information that our chief operating decision maker ("CODM") uses to manage the business, we disaggregate revenue by type and market application within each segment. No other level of disaggregation is required considering the type of products, customers, markets, contracts, duration of contracts, timing of transfer of control and sales channels.

The following tables summarize revenue from contracts with customers (in thousands):

Sales by revenue type and segment

	Fiscal					
	20:	20	2019		2018	
	OEM Laser Sources	Industrial Lasers & Systems	OEM Laser Sources	Industrial Lasers & Systems	OEM Laser Sources	Industrial Lasers & Systems
Net sales:						
Products ⁽¹⁾	\$441,476	\$369,342	\$532,863	\$430,878	\$ 890,591	\$512,818
Other product and service revenues ⁽²⁾	317,453	100,728	353,813	113,086	368,886	130,278
Total net sales	\$758,929	\$470,070	\$886,676	\$543,964	\$1,259,477	\$643,096

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. REVENUE RECOGNITION (Continued)

- (1) Net sales primarily recognized at a point in time.
- (2) Includes sales of spare parts, related accessories, and other consumable parts as well as revenues from service agreements, of which \$62.4 million for fiscal 2020 was recognized over time.

Sales by market application and segment

	Fiscal					
	2020		2019		2018	
	OEM Laser Sources	Industrial Lasers & Systems	OEM Laser Sources	Industrial Lasers & Systems	OEM Laser Sources	Industrial Lasers & Systems
Net sales:						
Microelectronics	\$466,780	\$ 71,755	\$568,387	\$ 63,789	\$ 951,166	\$ 85,188
Materials processing	36,129	299,621	38,017	366,861	46,467	474,437
OEM components and instrumentation	158,748	89,799	163,095	103,693	140,616	80,207
Scientific and government						
programs	97,272	8,895	117,177	9,621	121,228	3,264
Total net sales	\$758,929	\$470,070	\$886,676	\$543,964	\$1,259,477	\$643,096

See Note 18, "Segment and Geographic Information" for revenue disaggregation by reportable segment and geographic region.

Contract Balances

We record accounts receivable when we have an unconditional right to the consideration. Contract liabilities are recorded when cash payments are received or due in advance of performance. Contract liabilities consist of customer deposits and deferred revenue, where we have unsatisfied or partly satisfied performance obligations. Contract liabilities classified as customer deposits are included in other current liabilities and contract liabilities classified as deferred revenue are included in other current liabilities or other long-term liabilities on our consolidated balance sheets. Payment terms vary by customer.

A rollforward of our customer deposits and deferred revenue are as follows (in thousands):

	Fiscal	
	2020	2019
Beginning balance	\$ 42,550	\$ 55,637
Amount of customer deposits and deferred revenue recognized in		
income	(171,521)	(189,318)
Additions to customer deposits and deferred revenue	183,604	177,753
Translation adjustments	1,706	(1,522)
Ending balance	\$ 56,339	\$ 42,550

Remaining performance obligations represent the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied as of the end of the reporting period. The following table includes estimated revenue expected to be recognized in the future related to performance obligations for sales of

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. REVENUE RECOGNITION (Continued)

maintenance agreements, extended warranties, installation, and contracts with customer acceptance provisions included in customer deposits and deferred revenue as follows (in thousands):

	1 year	Thereafter	Total
Performance obligations as of September 28, 2019	\$34,538	\$ 8,012	\$42,550
Performance obligations as of October 3, 2020	42,715	13,624	56,339

4. BUSINESS COMBINATIONS

Fiscal 2019 Acquisitions

Ondax

On October 5, 2018, we acquired privately held Ondax for approximately \$12.0 million, excluding transaction costs. Ondax developed and produced photonic components which are used on an OEM basis by the laser industry as well as incorporated into its own stabilized lasers and Raman Spectroscopy systems. Ondax's operating results have been included in our Industrial Lasers & Systems segment. See Note 18, "Segment and Geographic Information."

Our allocation of the purchase price is as follows (in thousands):

Tangible assets:

Cash	\$ 103
Accounts receivable	534
Inventories	1,793
Prepaid expenses and other assets	17
Deferred tax assets	681
Property and equipment	122
Liabilities assumed	(499)
Intangible assets:	
Existing technology	5,600
Customer relationships	300
Goodwill	3,333
Total	\$11,984

Results of operations for the business have been included in our consolidated financial statements subsequent to the date of acquisition and pro forma results of operations in accordance with authoritative guidance for prior periods have not been presented because the effect of the acquisition was not material to our prior period consolidated financial results.

The identifiable intangible assets are being amortized over their respective useful lives of 1 to 8 years. The fair values of the acquired intangibles were determined using the income approach. In performing these valuations, the key underlying probability-adjusted assumptions of the discounted cash flows were projected revenues, gross margin expectations and operating cost estimates. The valuations were based on the information that was available as of the acquisition date and the expectations and assumptions that have been deemed reasonable by our management. There are inherent uncertainties and management judgment required in these determinations. This acquisition resulted in a purchase price that exceeded the estimated fair value of tangible and intangible assets, which was allocated to goodwill.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. BUSINESS COMBINATIONS (Continued)

We believe the amount of goodwill relative to identifiable intangible assets relates to several factors including: (1) potential buyer-specific synergies related to the development of new technologies; and (2) the potential to leverage our sales force to attract new customers.

In the quarter ended April 4, 2020, we performed an interim impairment test and the entire goodwill balance and a portion of the existing technology intangible assets were impaired. See Note 8, "Goodwill and Intangible Assets".

None of the goodwill from this purchase is deductible for tax purposes.

Quantum

On October 5, 2018, we acquired certain assets of Quantum Coating, Inc. ("Quantum") for approximately \$7.0 million, excluding transaction costs, and accounted for the transaction as an asset purchase.

Our allocation of the purchase price is as follows (in thousands):

\$2,770
1,600
230
2,300
100
\$7,000

The identifiable intangible assets are being amortized over their respective useful lives of 1 to 5 years. The fair values of the acquired intangibles were determined using the income approach. In performing these valuations, the key underlying probability-adjusted assumptions of the discounted cash flows were projected revenues, gross margin expectations and operating cost estimates. The valuations were based on the information that was available as of the acquisition date and the expectations and assumptions that have been deemed reasonable by our management. There are inherent uncertainties and management judgment required in these determinations.

Fiscal 2018 Acquisitions

On March 8, 2018, we acquired OR Laser for approximately \$47.4 million, excluding transaction costs. OR Laser produced laser-based material processing equipment for a variety of uses, including additive manufacturing, welding, cladding, marking, engraving and drilling. OR Laser's operating results have been included in our Industrial Lasers & Systems segment. See Note 18, "Segment and Geographic Information."

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. BUSINESS COMBINATIONS (Continued)

Our allocation of the purchase price is as follows (in thousands):

Tangible assets:

Cash	\$ 1,936
Accounts receivable	3,973
Inventories	2,360
Prepaid expenses and other assets	630
Property and equipment	1,515
Liabilities assumed	(5,119)
Deferred tax liabilities	(4,517)
Intangible assets:	
Existing technology	14,100
Non-competition	200
Backlog	100
Customer relationships	700
Trademarks	50
Goodwill	31,456
Total	\$47,384

Results of operations for the business have been included in our consolidated financial statements subsequent to the date of acquisition and pro forma results of operations in accordance with authoritative guidance for prior periods have not been presented because the effect of the acquisition was not material to our prior period consolidated financial results.

The identifiable intangible assets were being amortized over their respective useful lives of 1 to 8 years until they were fully impaired in the quarter ended April 4, 2020. The fair value of the acquired intangibles was determined using the income approach. In performing these valuations, the key underlying probability-adjusted assumptions of the discounted cash flows were projected revenues, gross margin expectations and operating cost estimates. The valuations were based on the information that was available as of the acquisition date and the expectations and assumptions that have been deemed reasonable by our management. There are inherent uncertainties and management judgment required in these determinations. This acquisition resulted in a purchase price that exceeded the estimated fair value of tangible and intangible assets, which was allocated to goodwill.

We believe the amount of goodwill relative to identifiable intangible assets relates to several factors including: (1) potential buyer-specific synergies related to the development of new technologies related primarily to the additive manufacturing business; and (2) the potential to leverage our sales force to attract new customers and revenue and cross-sell to existing customers.

In the quarter ended April 4, 2020, we performed an interim impairment test and the entire goodwill balance and remaining net book value of the existing technology and customer relationships intangible assets were fully impaired. See Note 8, "Goodwill and Intangible Assets".

None of the goodwill from this purchase is deductible for tax purposes.

We expensed \$0.6 million of acquisition-related costs as selling, general and administrative expenses in our consolidated statement of operations in fiscal 2018.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. FAIR VALUES

We measure our cash equivalents and marketable securities at fair value. The fair values of our financial assets and liabilities are determined using quoted market prices of identical assets or quoted market prices of similar assets from active markets. We recognize transfers between levels within the fair value hierarchy, if any, at the end of each quarter. There were no transfers between levels during the periods presented. As of October 3, 2020 and September 28, 2019, we had one investment carried on a cost basis. See Note 9, "Balance Sheet Details." If we were to fair value this investment, it would be based upon Level 3 inputs. This investment is not considered material to our consolidated financial statements.

We measure the fair value of outstanding debt obligations for disclosure purposes on a recurring basis. As of October 3, 2020, the current and long-term portion of long-term obligations of \$6.8 million and \$411.1 million, respectively, are reported at amortized cost. As of September 28, 2019, the current and long-term portion of long-term obligations of \$4.9 million and \$392.2 million, respectively, are reported at amortized cost. These outstanding obligations are classified as Level 2 as they are not actively traded and are valued using a discounted cash flow model that uses observable market inputs. Based on the discounted cash flow model, the fair value of the outstanding debt approximates amortized cost.

Financial assets and liabilities measured at fair value as of October 3, 2020 and September 28, 2019 are summarized below (in thousands):

	Aggregate Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Aggregate Fair Value	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs
	Fis	scal year-end 20	20	Fi	scal year-end 2	019
		(Level 1)	(Level 2)		(Level 1)	(Level 2)
Assets:						
Cash equivalents:						
Money market fund deposits	\$ 36,646	\$ 36,646	\$ —	\$21,422	\$21,422	\$ —
Certificates of deposit	56,191	56,191	_	_	_	_
Short-term investments:						
U.S. Treasury and agency obligations ⁽¹⁾	35,346	_	35,346	120	_	120
Prepaid and other assets:						
Foreign currency contracts ⁽²⁾	812	_	812	370	_	370
Money market fund deposits – Deferred comp and supplemental plan ⁽³⁾	203	203	_	433	433	_
Mutual funds – Deferred comp and supplemental plan ⁽³⁾	22,778	22,778		22,419	22,419	
Total	\$151,976	\$115,818	\$36,158	\$44,764	\$44,274	\$ 490
Liabilities:						
Other current liabilities:						
Foreign currency contracts ⁽²⁾	(2,811)	_	(2,811)	(960)	_	(960)
Total	\$149,165	\$115,818	\$33,347	\$43,804	\$44,274	\$(470)

⁽¹⁾ Valuations are based upon quoted market prices in active markets involving similar assets. The market inputs used to value these instruments generally consist of market yields, reported trades, broker/dealer

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. FAIR VALUES (Continued)

quotes or alternative pricing sources with reasonable levels of price transparency. Pricing sources include industry standard data providers, security master files from large financial institutions, and other third party sources which are input into a distribution-curve-based algorithm to determine a daily market value. This creates a "consensus price" or a weighted average price for each security.

- (2) The principal market in which we execute our foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants usually are large commercial banks. Our foreign currency contracts' valuation inputs are based on quoted prices and quoted pricing intervals from public data sources and do not involve management judgment. See Note 7, "Derivative Instruments and Hedging Activities."
- (3) The fair value of mutual funds is determined based on quoted market prices. Securities traded on a national exchange are stated at the last reported sales price on the day of valuation; other securities traded in over-the-counter markets and listed securities for which no sale was reported on that date are stated as the last quoted bid price.

6. SHORT-TERM INVESTMENTS

We consider all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents. Investments classified as available-for-sale are reported at fair value with unrealized gains and losses, net of related income taxes, recorded as a separate component of OCI in stockholders' equity until realized. Interest and amortization of premiums and discounts for debt securities are included in interest income. Gains and losses on securities sold are determined based on the specific identification method and are included in other income (expense).

Cash, cash equivalents and short-term investments consist of the following (in thousands):

	Fiscal 2020 year-end			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$440,258	\$ —	\$ —	\$440,258
Short-term investments:				
Available-for-sale securities:				
U.S. Treasury and agency obligations	\$ 35,311	\$36	\$ (1)	\$ 35,346
Total short-term investments	\$ 35,311	<u>\$36</u>	<u>\$(1)</u>	\$ 35,346
		Fiscal 201	9 year-end	
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$305,833	<u> </u>	<u> </u>	\$305,833
Short-term investments:				
Available-for-sale securities:				
U.S. Treasury and agency obligations	\$ 120	\$ —	\$ —	\$ 120
Total short-term investments	\$ 120		Φ.	\$ 120

There were less than \$0.1 million of unrealized gains and losses at October 3, 2020. None of the \$1,000 in unrealized losses at October 3, 2020 were considered to be other-than-temporary impairments. There were no unrealized gains or losses at September 28, 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. SHORT-TERM INVESTMENTS (Continued)

The amortized cost and estimated fair value of available-for-sale investments in debt securities as of October 3, 2020 and September 28, 2019 classified as short-term investments on our consolidated balance sheets, were as follows (in thousands):

	Fiscal year-end				
	2020		2019		
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	
Investments in available-for-sale debt securities due in less than one year	\$35,311	\$35,346	<u>\$120</u>	\$120	

During fiscal 2020, we received \$5,000 in proceeds from the sale of available-for-sale securities and realized no gross gains or losses. During fiscal 2019, we received no proceeds from the sale of available-for-sale securities and realized no gross gains or losses.

7. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

We maintain operations in various countries outside of the United States and have foreign subsidiaries that manufacture and sell our products in various global markets. The majority of our sales are transacted in U.S. Dollars. However, we do generate revenues in other currencies, primarily the Euro, Japanese Yen, South Korean Won, Singapore Dollar, and Chinese Renminbi. As a result, our earnings, cash flows, and cash balances are exposed to fluctuations in foreign currency exchange rates. We attempt to limit these exposures through financial market instruments. We utilize derivative instruments, primarily forward contracts with maturities of two months or less, to manage our exposure associated with anticipated cash flows and net asset and liability positions denominated in foreign currencies. Gains and losses on the forward contracts are mitigated by gains and losses on the underlying instruments. We do not use derivative financial instruments for speculative or trading purposes. The credit risk amounts represent our gross exposure to potential accounting loss on derivative instruments that are outstanding or unsettled if all counterparties failed to perform according to the terms of the contract, based on then-current currency rates at each respective date.

Non-Designated Derivatives

The total outstanding notional contract and fair value asset (liability) amounts of non-designated hedge contracts, with maximum maturity of two months, are as follows (in thousands):

	U.S. Notional Contract Value		U.S. Fair Value	
	Fiscal 2020 year-end	Fiscal 2019 year-end	Fiscal 2020 year-end	Fiscal 2019 year-end
Foreign currency hedge contracts				
Purchase	\$ 169,206	\$ 53,920	\$(1,802)	\$(117)
Sell	\$(166,813)	\$(86,984)	\$ (197)	\$(473)

The fair value of our derivative instruments is included in prepaid expenses and other assets and in other current liabilities in our Consolidated Balance Sheets. See Note 5, "Fair Values."

During fiscal 2020, 2019, and 2018, we recognized a gain of \$1.1 million, a loss of \$5.8 million, and a loss of \$5.5 million, respectively, in other income (expense) for derivative instruments not designated as hedging instruments.

Master Netting Arrangements

To mitigate credit risk in derivative transactions, we enter into master netting arrangements that allow each counterparty in the arrangements to net settle amounts of multiple and separate derivative transactions

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES (Continued)

under certain conditions. We present the fair value of derivative assets and liabilities within our consolidated balance sheet on a gross basis even when derivative transactions are subject to master netting arrangements and may otherwise qualify for net presentation. The impact of netting derivative assets and liabilities is not material to our financial position for any of the periods presented. Our derivative contracts do not contain any credit risk related contingent features and do not require collateral or other security to be furnished by us or the counterparties.

8. GOODWILL AND INTANGIBLE ASSETS

Goodwill is tested for impairment on an annual basis and between annual tests if events or circumstances indicate that an impairment loss may have occurred, and we write down these assets when impaired. We perform our annual impairment tests during the fourth quarter of each fiscal year using the opening balance sheet as of the first day of the fourth quarter, with any resulting impairment recorded in the fourth quarter of the fiscal year.

In the quarter ended April 4, 2020, the worldwide spread of coronavirus ("COVID-19") created significant volatility, uncertainty and disruption to the global economy, representing an indicator to test our goodwill for impairment. Based on our internal projections and the preparation of our financial statements for the quarter ended April 4, 2020, and considering the forecasted decrease in demand due to the COVID-19 pandemic and other factors, we believed that the fair value of our ILS reporting unit might no longer have exceeded its carrying value and performed an interim goodwill impairment test on the ILS reporting unit. We also performed an interim goodwill impairment test on the OLS reporting unit.

Our goodwill impairment tests for the ILS and OLS reporting units were performed by comparing the fair value of the reporting units with their carrying values and recognizing an impairment charge for the amount by which the carrying value exceeded the fair value. Based on the estimated fair value of the ILS reporting unit, in the quarter ended April 4, 2020, we recorded a non-cash pre-tax charge related to the ILS reporting unit of \$327.2 million, reducing the goodwill balance of the reporting unit to zero. The impairment charge was primarily the result of a decline in projected cash flows of the ILS reporting unit driven by lower forecasted sales volumes and profitability in several business units. The impairment charge was also the result of changes in certain market-related inputs to the analysis to reflect macro-economic changes caused by the impact of COVID-19, including lower pricing multiples for comparable public companies. No impairment charge was recognized for the OLS reporting unit as the fair value significantly exceeded the carrying value of the reporting unit.

In assessing goodwill for impairment, we were required to make significant judgments related to the fair value of our reporting units. We used a combination of the Income (discounted cash flow) approach and the Market (market comparable) approach to estimate the fair value of our reporting units. The Income approach utilizes the discounted cash flow model to provide an estimation of fair value based on the cash flows that a business expects to generate. These cash flows are based on forecasts developed internally by management which are then discounted at an after tax rate of return required by equity and debt market participants of a business enterprise. Our assumptions used in the forecasts are based on historical data, supplemented by current and anticipated market conditions, estimated growth rates, and management's plans. The rate of return on cost of capital is weighted based on the capitalization of comparable companies. We utilized a discount rate for each of our reporting units that represents the risks that our businesses face, considering their sizes, their current economic environment and other industry data as we believe is appropriate. The Market approach determines fair value by comparing the reporting units to comparable companies in similar lines of business that are publicly traded. The selection of comparable companies is based on the markets in which the reporting units operate giving consideration to risk profiles, size, geography and diversity of products and services. Total Enterprise Value (TEV) multiples such as TEV to revenues and TEV to earnings (if applicable) before interest and taxes of the publicly traded companies are calculated. We utilized multiples for each of our reporting units that represent the risks that our businesses face,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. GOODWILL AND INTANGIBLE ASSETS (Continued)

considering their sizes, their current economic environment and other industry data as we believe is appropriate. The interim goodwill impairment testing results were also reconciled with our market capitalization as of April 4, 2020, as the final step in the impairment testing.

Before performing the goodwill impairment test for the ILS reporting unit, we performed impairment tests on the long-lived assets allocated to the asset group of the ILS reporting unit, including intangible assets, property, plant and equipment, and ROU assets as of April 4, 2020, due primarily to the same indicators that led to the interim goodwill impairment testing. Based on the impairment tests performed, we concluded that some of the long-lived assets allocated to the asset group of the ILS reporting unit were impaired as of April 4, 2020. Accordingly, we recorded non-cash pre-tax charges in the quarter ended April 4, 2020 related to the intangible assets, property, plant and equipment, and right-of-use ("ROU") assets of the ILS reporting unit of \$33.9 million, \$85.6 million, and \$1.8 million, respectively. We did not identify any indicators that would lead us to believe that the carrying value of the long-lived assets allocated to the asset group of the OLS reporting unit may not be recoverable as of April 4, 2020. In fiscal 2019, we did not have any impairment of intangible assets as a result of the impairment analysis.

We evaluate long-lived assets and amortizable intangible assets whenever events or changes in business circumstances or our planned use of assets indicate that their carrying amounts may not be fully recoverable or that their useful lives are no longer appropriate. In assessing our long-lived assets for impairment, we were required to make significant judgments related to the fair value of our long-lived assets, which are comprised of personal property, real property, and intangible assets. We used a combination of the Income, the Market approach, and the Cost (cost to create) approach to estimate the fair value of our long-lived assets. Our personal property assets consist of laser manufacturing and assembly equipment, semiconductor tools, laboratory and test equipment, furniture and fixtures, and computer hardware and software. We used the Cost Approach (with support from the Market Approach) to estimate the fair value of our personal property, taking into consideration the physical deterioration, functional obsolescence, and economic obsolescence of our personal property assets. Our real property assets consist of land and buildings, land rights (ground leased), and ROU assets. In determining the fair value of our real property assets, we used a combination of the Income, Market (sales comparison), and Cost approaches. We considered historical transaction information, current market conditions, operating performance, forecast growth, and marketderived rates of return in our real property determination of fair value. The fair value of our ROU assets was determined using the Income approach by considering off-market components of the associated ROU leases. Our intangible assets consist of technology and customer relationship assets, and we used the Income approach to estimate the fair value of our intangible assets. We identified cash flows associated with each intangible asset, which were discounted at an after-tax rate of return appropriate for the risk profile of each intangible asset.

We performed our annual impairment test using the opening balance sheet as of the first day of the fourth quarter of fiscal 2020 and noted no indications of impairment or triggering events, not already considered in the quarter ended April 4, 2020. In our fiscal 2020 annual testing, for our OLS reporting unit we conducted a qualitative assessment of the goodwill during the fourth quarter using the opening balance sheet as of the first day of the fourth quarter and concluded that it was more likely than not that the fair value of the reporting unit exceeded its carrying amounts. Based on our assessment, goodwill in the OLS reporting unit was not impaired as of the first day of the fourth quarter of fiscal 2020. As such, it was not necessary to perform the goodwill impairment test in the fourth quarter of fiscal 2020. There is no goodwill in the ILS reporting unit due to the impairment of all goodwill of the ILS reporting unit in the second quarter of fiscal 2020. Between the completion of our assessment and the end of the fourth quarter of fiscal 2020, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. GOODWILL AND INTANGIBLE ASSETS (Continued)

The changes in the carrying amount of goodwill by segment for fiscal 2020 and 2019 are as follows (in thousands):

	Industrial Lasers & Systems ⁽¹⁾	OEM Laser Sources ⁽²⁾	Total
Balance as of September 29, 2018	\$ 342,208	\$100,732	\$ 442,940
Additions (see Note 4)	3,333	_	3,333
Translation adjustments	(15,260)	(3,912)	(19,172)
Balance as of September 28, 2019	330,281	96,820	427,101
Impairment charges	(327,203)	_	(327,203)
Translation adjustments	(3,078)	4,497	1,419
Balance as of October 3, 2020	<u> </u>	\$101,317	\$ 101,317

⁽¹⁾ Gross amount of goodwill for our ILS segment was \$340.2 million at October 3, 2020 and \$343.3 million at September 28, 2019, respectively. At October 3, 2020 and September 28, 2019, the accumulated impairment loss for the ILS reporting unit was \$340.2 million and \$13.0 million, respectively, reflecting impairment charges in fiscal 2020 and fiscal 2009.

The components of our amortizable intangible assets are as follows (in thousands):

	Fiscal year-end 2020 Fiscal year-end 2019		9			
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Existing technology	\$46,547	\$(37,630)	\$ 8,917	\$193,704	\$(131,429)	\$62,275
Customer relationships	24,388	(12,923)	11,465	42,083	(21,512)	20,571
Trade name	_	_	_	5,261	(5,138)	123
Production know-how	2,300	(917)	1,383	2,300	(456)	1,844
Total	\$73,235	<u>\$(51,470)</u>	\$21,765	\$243,348	<u>\$(158,535)</u>	\$84,813

For accounting purposes, when an intangible asset is fully amortized, it is removed from the disclosure schedule. The net carrying amounts as of fiscal 2020, have been reduced by impairment charges of \$27.7 million and \$6.2 million for existing technology and customer relationships, respectively.

During the third quarter of fiscal 2019, in conjunction with our decision to exit a portion of our High Power Fiber Laser ("HPFL") business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain HPFL activities from our Hamburg, Germany facility, we abandoned the in-process research and development project totaling \$4.7 million and fully amortized the intangible asset. See Note 19, "Restructuring Charges."

The weighted average remaining amortization periods for existing technology, customer relationships, and production know-how are approximately 1.5 years, 6.1 years, and 3.0 years, respectively. Amortization expense for intangible assets during fiscal 2020, 2019, and 2018 was \$30.1 million, \$61.5 million, and

⁽²⁾ Gross amount of goodwill for our OLS segment was \$110.0 million and \$105.5 million at October 3, 2020 and September 28, 2019, respectively. At both October 3, 2020 and September 28, 2019, the accumulated impairment loss for the OLS reporting unit was \$8.7 million reflecting impairment charges in fiscal 2003 and fiscal 2009.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. GOODWILL AND INTANGIBLE ASSETS (Continued)

\$60.0 million, respectively. The change in accumulated amortization also includes \$2.9 million (increase) and \$7.8 million (decrease) of foreign exchange impact for fiscal 2020 and fiscal 2019, respectively.

Estimated amortization expense for the next five fiscal years and all years thereafter are as follows (in thousands):

	Estimated Amortization Expense
2021	. \$ 9,722
2022	. 3,272
2023	. 2,703
2024	. 1,920
2025	. 1,919
Thereafter	. 2,229
Total	. \$21,765

9. BALANCE SHEET DETAILS

Prepaid expenses and other assets consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Prepaid and refundable income taxes	\$50,548	\$44,096
Other taxes receivable	13,006	11,208
Prepaid expenses and other assets	24,696	22,689
Total prepaid expenses and other assets	\$88,250	\$77,993

Other assets consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Assets related to deferred compensation arrangements (see Note 12)	\$ 39,720	\$ 35,842
Deferred tax assets (see Note 16)	102,028	87,011
Right of use assets, net – operating leases (See Note 11)	85,905	_
Right of use assets, net – finance leases (See Note 11)	656	_
Other assets ⁽¹⁾	14,266	18,111
Total other assets	\$242,575	\$140,964

⁽¹⁾ In the first quarter of fiscal 2019, we invested 3.0 million Euro (\$3.4 million) in 3D-Micromac AG, a private company in Germany. The investment is included in other assets and is being carried on a cost basis and is adjusted for impairment if we determine that indicators of impairment exist at any point in time. During the second quarter of fiscal 2020, we determined that our investment became impaired and wrote it down to its fair value. As a result, we recorded a non-cash impairment charge of \$2.5 million to operating expense in our results of operations in the second quarter of fiscal 2020.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. BALANCE SHEET DETAILS (Continued)

Other current liabilities consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Accrued payroll and benefits	\$ 54,211	\$ 55,698
Operating lease liability, current (see Note 11)	15,366	_
Finance lease liability, current (see Note 11)	399	_
Accrued expenses and other	36,432	41,039
Warranty reserve (see Note 2)	35,032	36,460
Customer deposits	9,717	10,843
Deferred revenue	32,998	23,695
Total other current liabilities	\$184,155	\$167,735

Other long-term liabilities consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Long-term taxes payable	\$ 15,374	\$ 37,385
Operating lease liability, long-term (see Note 11)	75,264	_
Finance lease liability, long-term (see Note 11)	178	_
Deferred compensation (see Note 12)	42,854	39,715
Deferred tax liabilities (see Note 16)	15,721	27,785
Deferred revenue	13,624	8,012
Asset retirement obligations liability (see Note 2)	5,892	4,934
Defined benefit plan liabilities (see Note 17)	45,810	45,862
Other long-term liabilities	6,357	2,188
Total other long-term liabilities	\$221,074	\$165,881

10. BORROWINGS

On November 7, 2016 (the "Closing Date"), we entered into a Credit Agreement by and among us, Coherent Holding BV & Co. K.G. (formerly Coherent Holding GmbH), as borrower (the "Borrower"), and certain of our direct and indirect subsidiaries from time to time party thereto, as guarantors, the lenders from time to time party thereto, Barclays Bank PLC, as administrative agent and an L/C Issuer, Bank of America, N.A., as an L/C Issuer, and MUFG Union Bank, N.A., as an L/C Issuer (the "Initial Credit Agreement" and, as amended by the Amendments (defined below), the "Credit Agreement"). The Initial Credit Agreement provided for a 670.0 million Euro senior secured term loan facility (the "Euro Term Loan") and a \$100.0 million senior secured revolving credit facility (the "Revolving Credit Facility") with a \$30.0 million letter of credit sublimit and a \$10.0 million swing line sublimit, in each case, which may be increased from time to time pursuant to an incremental feature set forth in the Credit Agreement. The Initial Credit Agreement was amended on May 8, 2017 (the "First Amendment") to reduce the interest rate margins applicable to the Euro Term Loan and was amended again on July 5, 2017 (the "Second Amendment" and, together with the First Amendment, the "Amendments") to make certain technical changes in connection with the conversion of the Borrower from a German company with limited liability to a German limited partnership.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. BORROWINGS (Continued)

The Credit Agreement contains customary mandatory prepayment provisions. The Borrower has the right to prepay loans under the Credit Agreement in whole or in part at any time without premium or penalty, subject to customary breakage costs. Revolving loans may be borrowed, repaid and reborrowed until the fifth anniversary of the Closing Date, at which time all outstanding revolving loans must be repaid. The Euro Term Loan matures on the seventh anniversary of the Closing Date (in the first quarter of fiscal 2024), at which time all outstanding principal and accrued and unpaid interest on the Euro Term Loan must be repaid.

As of October 3, 2020, the outstanding principal amount of the Euro Term Loan was 358.2 million Euros. As of October 3, 2020, the outstanding amount of the Revolving Credit Facility was \$10.0 million plus a 10.0 million Euro letter of credit.

Loans under the Credit Agreement bear interest, at the Borrower's option, at a rate equal to either (i)(x) in the case of calculations with respect to U.S. Dollars or certain other alternative currencies, the London interbank offered rate (the "LIBOR") or (y) in the case of calculations with respect to the Euro, the euro interbank offered rate ("EURIBOR" and, together with LIBOR, the "Eurocurrency Rate") or (ii) a base rate (the "Base Rate") equal to the highest of (x) the federal funds rate, plus 0.50%, (y) the prime rate then in effect and (z) the Eurocurrency Rate for loans denominated in U.S. Dollars applicable to a one-month interest period, plus 1.0%, in each case, plus an applicable margin that is subject to adjustment pursuant to a pricing grid based on consolidated total gross leverage ratio. At October 3, 2020, the applicable margin for Euro Term Loans borrowed as Eurocurrency Rate loans was 2.25% per annum and as Base Rate loans was 1.25%. The applicable margin for revolving loans borrowed as Eurocurrency Rate loans was 4.25% per annum and as Base Rate loans was 3.25% per annum. Interest on Base Rate Loans is payable quarterly in arrears. Interest on Eurocurrency Rate loans is payable at the end of the applicable interest period (or at three month intervals if the interest period exceeds three months).

The Credit Agreement requires the Borrower to make scheduled quarterly payments on the Euro Term Loan of 0.25% of the original principal amount of the Euro Term Loan, with any remaining principal payable at maturity. A commitment fee accrues on any unused portion of the revolving loan commitments under the Credit Agreement at a rate of 0.375% or 0.5% depending on the consolidated total gross leverage ratio at any time of determination. The Borrower is also obligated to pay other customary fees for a credit facility of this size and type.

On the Closing Date, we and certain of our direct and indirect subsidiaries, as guarantors, provided an unconditional guaranty of all obligations of the Borrower and the other loan parties arising under the Credit Agreement, the other loan documents and under swap contracts and treasury management agreements with the lenders or their affiliates (with certain limited exceptions). The Borrower and the guarantors have also granted security interests in substantially all of their assets to secure such obligations.

The Credit Agreement contains customary affirmative and negative covenants, including covenants limiting the ability of us and our subsidiaries to, among other things, incur debt, grant liens, make investments, make certain restricted payments, transact with affiliates, and sell assets. The Credit Agreement also requires us and our subsidiaries to maintain a senior secured net leverage ratio as of the last day of each fiscal quarter of less of than or equal to 3.50 to 1.00. We were in compliance with all covenants at October 3, 2020.

We incurred \$28.5 million of debt issuance costs related to the Euro Term Loan and \$0.5 million of debt issuance costs to the original lenders related to the First Amendment, which are included in short-term borrowings and current portion of long-term obligations and long-term obligations in the consolidated balance sheets and will be amortized to interest expense over the seven year life of the Euro Term Loan using the effective interest method, adjusted to accelerate amortization related to voluntary repayments. We incurred \$2.3 million of debt issuance costs in connection with the Revolving Credit Facility which were

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

10. BORROWINGS (Continued)

capitalized and included in prepaid expenses and other assets in the consolidated balance sheets and will be amortized to interest expense using the straight-line method over the contractual term of 5 years of the Revolving Credit Facility.

Additional sources of cash available to us were international currency lines of credit and bank credit facilities totaling \$16.9 million as of October 3, 2020, of which \$16.1 million was unused and available. These unsecured international credit facilities were used in Europe and Japan in fiscal 2020. As of October 3, 2020, we had utilized \$0.8 million of the international credit facilities as guarantees in Europe.

Short-term borrowings and current portion of long-term obligations consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Current portion of Euro Term Loan ⁽¹⁾	\$ 4,970	\$ 2,748
1.3% Term loan due 2024	1,465	1,367
1.0% State of Connecticut term loan due 2023	382	378
Capital lease obligations	_	370
Line of credit borrowings	10,000	10,000
Total short-term borrowings and current portion of long-term obligations	\$16,817	\$14,863

⁽¹⁾ Net of debt issuance costs of \$2.9 million and \$4.6 million at October 3, 2020 and September 28, 2019, respectively.

Long-term obligations consist of the following (in thousands):

	Fiscal year-end	
	2020	2019
Euro Term Loan due 2024 ⁽¹⁾	\$406,099	\$385,208
1.3% Term loan due 2024	4,395	5,466
1.0% State of Connecticut term loan due 2023	646	1,028
Capital lease obligations	_	536
Total long-term obligations	\$411,140	\$392,238

⁽¹⁾ Net of debt issuance costs of \$5.9 million and \$6.4 million at October 3, 2020 and September 28, 2019, respectively.

Contractual maturities of our debt obligations, excluding line of credit borrowings, as of October 3, 2020 are as follows (in thousands):

	Amount
2021	\$ 9,700
2022	9,698
2023	9,584
2024	397,752
Total	\$426,734

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. LEASES

We determine if an arrangement contains a lease at inception for arrangements with an initial term of more than 12 months, and classify it as either a finance or operating lease. We lease certain real and personal property from unrelated third parties under non-cancellable operating leases that expire at various dates through fiscal 2032. These operating leases are mainly for administrative offices, research-and-development, and manufacturing facilities, as well as sales offices in various countries around the world. Certain leases require us to pay property taxes, insurance, and routine maintenance, and include escalation clauses. Many leases include one or more options to renew. We assume renewals in our determination of the lease term when the renewals are deemed to be reasonably assured at lease commencement. We have also entered into various finance leases to obtain servers and certain other equipment for our operations. These arrangements are typically for three to six years. Our assets, liabilities, and lease costs related to finance leases are immaterial.

As the rates implicit in our leases are not readily determinable, we use incremental borrowing rates based on the information available at the commencement date in determining the present value of future lease payments. We consider both the credit rating and the length of the lease when calculating the incremental borrowing rate. We combine lease and non-lease components into a single lease component for both our operating and finance leases.

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 generally recognize sublease income on a straight-line basis over the sublease term.

As a result of interim impairment testing performed on long-lived assets in the quarter ended April 4, 2020, we recorded non-cash pre-tax charges related to the ROU assets of the ILS reporting unit of \$1.8 million in the quarter ended April 4, 2020. See Note 8, "Goodwill and Intangible Assets" for discussion of the interim impairment testing.

In fiscal 2020, we completed a sale-leaseback transaction for our Hamburg, Germany facility in which we sold the buildings for a purchase price, net of expenses, of \$19.6 million and leased back a portion of the facilities with lease terms from 6 to 15 years with early termination provisions after 3 and 5 years, respectively. The sale qualified for sale-leaseback operating lease accounting classification and we recorded a gain, net of selling costs, on the transaction of \$2.2 million, which is recorded in selling, general and administrative expense in the consolidated statements of operations. We also recorded operating lease right of use assets of \$5.1 million and corresponding operating lease liabilities of \$5.1 million. The non-cash portion of the gain of \$4.0 million is included in Other non-cash expense (gain) within cash flows from operations in our consolidated statements of cash flows.

The components of operating lease costs (in thousands), lease term (in years) and discount rate are as follows:

	Fiscal
	2020
Operating lease cost	\$19,629
Variable lease cost	1,421
Short-term lease cost	459
Sublease income	(126)
Total lease cost	\$21,383

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. LEASES (Continued)

	Fiscal year-end
	2020
Weighted average remaining lease term	7.8
Weighted average discount rate	4.9%
Supplemental cash flow information related to leases are as follows (in thousands):	
	Fiscal year-end
	2020
Operating cash outflows from operating leases	\$19,391
ROU assets obtained in exchange for new operating lease liabilities	10,884

See Note 9, "Balance Sheet Details" for supplemental balance sheet information related to leases.

Maturities of our operating lease liabilities, which do not include short-term leases and variable lease payments at October 3, 2020 are as follows (in thousands):

	Operating Leases
2021	\$ 18,781
2022	17,909
2023	15,627
2024	12,107
2025	10,844
2026 and thereafter	36,902
Total minimum lease payments	112,170
Amounts representing interest	(21,540)
Present value of total operating lease liabilities	\$ 90,630

As of September 28, 2019, future minimum lease payments as defined under the previous lease accounting guidance ASC 840 under our non-cancellable operating leases are as follows (in thousands):

	Amount
2020	\$19,578
2021	14,579
2022	10,405
2023	6,817
2024	4,156
2025 and thereafter	10,755
Total minimum lease payments	\$66,290

Rent expense was \$22.9 million and \$22.1 million in fiscal 2019, and 2018, respectively.

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS

Deferred Compensation Plans

Under our deferred compensation plans ("plans"), eligible employees are permitted to make compensation deferrals up to established limits set under the plans and accrue income on these deferrals

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS (Continued)

based on reference to changes in available investment options. While not required by the plans, we choose to invest in insurance contracts and mutual funds in order to approximate the changes in the liability to the employees. These investments and the liability to the employees were as follows (in thousands):

	Fiscal year-end	
	2020	2019
Cash surrender value of life insurance contracts	\$18,520	\$16,223
Fair value of mutual and money market funds	22,981	22,852
Total assets	\$41,501	\$39,075
Total assets, included in:		
Prepaid expenses and other assets	\$ 1,781	\$ 3,233
Other assets	39,720	35,842
Total assets	\$41,501	\$39,075
	Fiscal y	ear-end
	2020	2019
Total deferred compensation liability, included in:		
Other current liabilities	\$ 1,781	\$ 3,233
Other long-term liabilities	42,854	39,715
Total deferred compensation liability	\$44,635	\$42,948

Life insurance premiums loads, policy fees, and cost of insurance that are paid from the asset investments and gains and losses from the asset investments for these plans are recorded as components of other income or expense; such amounts were net gains of \$6.1 million in fiscal 2020, \$1.1 million in fiscal 2019, and \$4.8 million in fiscal 2018, and fluctuate on a quarterly basis. Changes in the obligation to plan participants are recorded as a component of operating expenses and cost of sales; such amounts were net losses of \$5.3 million in fiscal 2020, \$1.5 million in fiscal 2019, and \$5.2 million in fiscal 2018, and fluctuate on a quarterly basis. Liabilities associated with participant balances under our deferred compensation plans are affected by individual contributions and distributions made, as well as gains and losses on the participant's investment allocation election.

Coherent Employee Retirement and Investment Plan

Under the Coherent Employee Retirement and Investment Plan, we match employee contributions 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 contributions (net of forfeitures) during fiscal 2020, 2019, and 2018 were \$6.1 million, \$5.7 million, and \$5.6 million, respectively.

Employee Stock Purchase Plan

We have an Employee Stock Purchase Plan ("ESPP") whereby eligible employees may authorize payroll deductions of up to 10% 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. During fiscal 2020, 2019, and 2018, a total of 107,284 shares, 108,034 shares, and 66,099 shares, respectively, were purchased by and distributed to employees at an average price of \$114.54, \$109.32, and \$159.97 per share, respectively. At fiscal 2020 year-end, we had 143,465 shares of our common stock reserved for future issuance under the plan.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS (Continued)

Stock Award Plans

We maintain stock plans in which employees, service providers, and non-employee directors are eligible participants. The plans, the 2011 Equity Incentive Plan (the "2011 Plan") and the Equity Incentive Plan (the "2020 Plan"), provide for a number of different equity-based grants, including options, time-based restricted stock units, and performance restricted stock units. Under the 2011 Plan, Coherent was able to grant options and awards (time-based restricted stock units and performance restricted stock units), of which grants with respect to 530,115 shares of common stock remained outstanding at fiscal 2020 year-end (calculated at 100% of target amount for performance awards). Under the 2020 Plan, Coherent may grant options and awards (time-based restricted stock units and performance restricted stock units) to purchase up to 3,080,000 shares of common stock plus any forfeited or cancelled shares subject to outstanding awards under the 2011 Plan, of which 3,034,036 shares remained available for grant at fiscal 2020 year-end. At fiscal 2020 year-end, all outstanding stock options and restricted stock units have been issued under plans approved by our shareholders. Following approval of the 2020 Plan by our shareholders on April 27, 2020, there will be no further grants of awards under the 2011 Equity Incentive Plan. However, the 2011 Equity Incentive Plan will continue to govern awards previously granted under it.

Since adoption of the 2011 Plan and the 2020 Plan, no stock options have been granted to employees. No options are outstanding as of fiscal 2020 year-end.

Non-employee directors are automatically granted time-based restricted stock units upon first joining the Board of Directors and then upon reelection. New non-employee directors initially receive an award of restricted stock units valued at approximately \$225,000 which vest over a two year period. The annual grant for non-employee directors is a value of approximately \$225,000 in shares of restricted stock units that vest on February 15 of the calendar year following the grant.

Restricted stock awards and restricted stock units are typically subject to vesting restrictions — either time-based, market-based or performance-based conditions for vesting. Until restricted stock vests, shares (including those issuable upon vesting of the applicable restricted stock unit) are generally subject to forfeiture if employment or service to the Company terminates prior to the release of restrictions and cannot be transferred.

- The service-based restricted stock awards generally vest within three years from the date of grant.
- The service-based restricted stock unit awards are generally subject to annual vesting over three years from the date of grant, though from time-to-time, depending upon exceptional circumstances, the Company has granted restricted stock unit awards with one or two year vesting. For example, the initial grants made to new members of the Board of Directors vest over two years and members of the Board of Directors have annual grants tied to their reelection to the Board, which vest on the following February 15.
- The market-based performance restricted stock unit award grants are generally subject to a single vest measurement three years from the date of grant, depending upon achievement of performance measurements based on the performance of the Company's total shareholder returns (as defined in the award) over the performance period compared with the performance of the applicable Russell Index or companies therein (or as otherwise determined by the Compensation and HR Committee).
- The performance restricted stock unit award grants based on goals related to free cash flow target amounts for the fiscal year vested as of fiscal 2020 year-end.

We recognize compensation expense for all share-based payment awards based on the fair value of such awards. The expense is recognized on a straight-line basis per tranche over the respective requisite service period of the awards.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS (Continued)

Determining Fair Value

Employee Stock Purchase Plan

Valuation and amortization method — We estimate the fair value of employee stock purchase shares using the Black-Scholes-Merton option-pricing formula. This fair value is then amortized on a straight-line basis over the purchase period.

Expected Term — The expected term represents the period of our employee stock purchase plan.

Expected Volatility — Our process for computing expected volatility considers both historical volatility and market-based implied volatility; however our estimate of expected forfeitures is based on historical employee data and could differ from actual forfeitures.

Risk-Free Interest Rate — The risk-free interest rate used in the Black-Scholes-Merton valuation method is based on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term.

The fair values of shares purchased under the employee stock purchase plan for fiscal 2020, 2019, and 2018 were estimated using the following weighted-average assumptions:

	Employee Stock Purchase Plans		
	Fiscal		
	2020	2019	2018
Expected life in years	0.5	0.5	0.5
Expected volatility	58.0%	47.9%	50.1%
Risk-free interest rate	1.0%	2.4%	1.6%
Weighted average fair value per share	\$43.54	\$40.77	\$64.39

Time-Based Restricted Stock Units

Time-based restricted stock units are fair valued at the closing market price on the date of grant.

Performance Restricted Stock Units

We grant performance restricted stock units to officers and certain employees. The performance restricted stock unit agreements provide for the award of performance stock units with each unit representing the right to receive one share of our common stock to be issued after the applicable award vesting period. The final number of units awarded, if any, for these performance grants will be determined as of the vesting dates, based upon our total shareholder return over the performance period compared to the applicable Russell Index or companies therein and could range from no units to a maximum of twice the initial award units.

The weighted average fair value for the performance units was determined using a Monte Carlo simulation model incorporating the following weighted average assumptions:

	riscai		
	2020	2019	2018
Risk-free interest rate	0.8%	2.9%	1.7%
Volatility	50.5%	43.7%	37.0%
Weighted average fair value	\$161.46	\$117.43	\$315.05

T2---1

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS (Continued)

We recognize the estimated cost of these awards, as determined under the simulation model, over the related service period of approximately 3 years, with no adjustment in future periods based upon the actual shareholder return over the performance period.

In addition, during fiscal 2020, we issued performance restricted stock unit award grants to certain employees with vesting based on goals related to free cash flow target amounts, with the initial fair value determined based on our closing stock price on the date of grant. Such awards were granted to serve as a performance incentive with a pay-for-performance forward-looking free cash flow target for the fiscal year in recognition of the impact of the COVID-19 pandemic. The number of shares issuable under these performance units upon satisfaction of the free cash flow performance criteria is capped at 100% of target. The total stock-based compensation of these awards will be adjusted based on the level of achievement of free cash flow for fiscal 2020. We believe that these awards will vest at 100% of target.

Stock Compensation Expense

The following table shows total stock-based compensation expense and related tax benefits included in the Consolidated Statements of Operations for fiscal 2020, 2019, and 2018 (in thousands):

	Fiscal		
	2020	2019	2018
Cost of sales	\$ 5,314	\$ 4,880	\$ 4,403
Research and development	4,478	2,990	3,247
Selling, general and administrative	34,995	28,596	25,088
Income tax benefit	(5,640)	(4,946)	(5,073)
	\$39,147	\$31,520	\$27,665

During fiscal 2020, \$6.7 million of stock-based compensation cost was capitalized as part of inventory for all stock plans, \$5.3 million was amortized into cost of sales, and \$2.8 million remained in inventory at October 3, 2020. During fiscal 2019, \$4.8 million of stock-based compensation cost was capitalized as part of inventory for all stock plans, \$4.8 million was amortized into cost of sales, and \$1.5 million remained in inventory at September 28, 2019.

At fiscal 2020 year-end, the total compensation cost related to unvested stock-based awards granted to employees under our stock plans but not yet recognized was approximately \$37.7 million. We do not estimate forfeitures and account for them as they occur. This cost will be amortized on a straight-line basis over a weighted-average period of approximately 1.5 years.

The stock option exercise tax benefits, if any, are reported in the statement of cash flows. The tax benefits result from tax deductions in excess of the stock-based compensation cost recognized and are determined on a grant-by-grant basis. We adopted the new accounting standard on share-based compensation in the first quarter of fiscal 2018. As a result, we recognized net excess tax benefits from stock award exercises and restricted stock unit vesting as a discrete tax benefit, which reduced the provision for income taxes by \$0.9 million, \$2.5 million, and \$12.8 million for fiscal 2020, 2019, and 2018, respectively.

Stock Awards Activity

At each of fiscal 2019 and 2018 year-end, we had 24,000 shares subject to vested stock options outstanding. The vested stock options were exercised in fiscal 2020 and none are outstanding at fiscal 2020 year-end.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. EMPLOYEE STOCK AWARD AND BENEFIT PLANS (Continued)

The following table summarizes the activity of our time-based and performance restricted stock units for fiscal 2020, 2019, and 2018 (in thousands, except per share amounts):

	Time Based Rest	ne Based Restricted Stock Units Performance Restricted Stock		ricted Stock Units
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested stock at September 30, 2017	399	\$118.83	176	\$105.34
Granted	99	254.20	78	315.05
Vested ⁽¹⁾	(213)	88.45	(95)	70.57
Forfeited	(6)	119.66	_	_
Nonvested stock at September 29, 2018	279	\$155.24	159	\$155.76
Granted	195	128.25	105	117.43
Vested ⁽¹⁾	(169)	127.90	(131)	74.48
Forfeited	(10)	170.97	_	_
Nonvested stock at September 28, 2019	295	\$152.47	133	\$184.26
Granted	284	141.05	84	152.96
Vested ⁽¹⁾	(150)	150.91	(81)	163.17
Forfeited	(10)	169.92	_	_
Nonvested stock at October 3, 2020	419	\$144.87	136	\$177.54

⁽¹⁾ Service-based restricted stock units vested during each fiscal year. Performance-based restricted stock units included at 100% of target goal. Under the terms of the market-based awards, the recipient may earn between 0% and 200% of the award. Under the terms of the performance-based awards based on free cash flow targets, the recipient may earn between 0% and 100% of the award.

Restricted Stock Units are converted into the right to receive common stock upon vesting; prior to issuance, the Company permits the employee holders to satisfy their tax withholding requirements by net settlement, whereby the Company withholds a portion of the shares to cover the applicable taxes based on the fair market value of the Company's stock at the vesting date. The number of shares withheld to cover tax payments was 88,000 in fiscal 2020, 120,000 in fiscal 2019, and 131,000 in fiscal 2018; tax payments made were \$13.5 million, \$15.2 million, and \$36.3 million, respectively.

13. COMMITMENTS AND CONTINGENCIES

Indemnifications

In the normal course of business, we enter into agreements that contain a variety of representations and warranties and provide for general indemnification. Exposure under these agreements is unknown because claims may be made against us in the future and we may record charges in the future as a result of these indemnification obligations. As of October 3, 2020, we did not have any material indemnification claims that were probable or reasonably possible.

Commitments

We maintain commitments to purchase inventory from our suppliers as well as fixed assets, services and other assets in the ordinary course of business. As of October 3, 2020, we had total estimated significant

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. COMMITMENTS AND CONTINGENCIES (Continued)

purchase commitments for inventory of approximately \$33.7 million and significant purchase obligations for fixed assets and services of \$50.8 million.

Legal Proceedings

We are subject to legal claims and litigation arising in the ordinary course of business, such as contractrelated, product sales and servicing, real estate, product liability, regulatory matters, employment or intellectual property claims.

Although we do not expect that such claims and litigation will ultimately have a material adverse effect on our consolidated financial position, results of operations or cash flows, an adverse result in one or more matters could negatively affect our results in the period in which they occur, or in future periods.

The United States and many foreign governments impose tariffs and duties on the import and export of certain products we sell and purchase. From time to time our customs compliance, product classifications, duty calculations, and payments are reviewed or audited by government agencies. Any adverse result in such a review or audit could negatively affect our results in the period in which they occur, or in future periods.

German authorities are currently investigating an export compliance matter involving one of our German subsidiaries involving four former employees (whose employment was terminated following our discovery of this matter). While under German law the subsidiary can be held liable for certain infringements by its employees of German export control laws we believe that this matter involves less than approximately 1.5 million Euros in transactions in the period currently under investigation and do not believe that the final resolution of this matter will be material to our consolidated financial position, results of operations or cash flows. However, the German government investigation is ongoing and it is possible that substantial payments, fines, penalties or damages could result. Even though we do not currently expect this matter to be material to our consolidated financial position, results of operations or cash flows, circumstances could change as the investigation progresses.

14. STOCK REPURCHASES

On February 6, 2018, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock from time to time through January 31, 2019. During fiscal 2018, we repurchased and retired 574,946 shares of outstanding common stock under this program at an average price of \$173.91 per share for a total of \$100.0 million, thereby repurchasing the full amount authorized under this program.

On October 28, 2018, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$250.0 million of our common stock through December 31, 2019, with a limit of no more than \$75.0 million per quarter. During fiscal 2019, we repurchased and retired 603,828 shares of outstanding common stock under this program at an average price of \$128.20 per share for a total of \$77.4 million. We made no repurchases under the program during fiscal 2020 and the program expired on December 31, 2019.

On February 5, 2020, our board of directors authorized a stock repurchase program authorizing the Company to repurchase up to \$100.0 million of our common stock through January 31, 2021. We made no repurchases under the program during fiscal 2020.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. OTHER INCOME (EXPENSE), NET

Other income (expense) includes other-net which is comprised of the following (in thousands):

	Fiscal		
	2020	2019	2018
Foreign exchange loss	\$(3,486)	\$(5,774)	\$(11,286)
Gain on deferred compensation investments, net (Note 12)	6,099	1,140	4,835
Other	828	(410)	(735)
Other – net	\$ 3,441	\$(5,044)	\$ (7,186)

16. INCOME TAXES

The provision for (benefit from) income taxes on income (loss) from continuing operations before income taxes consists of the following (in thousands):

	Fiscal		
	2020	2019	2018
Currently payable:			
Federal	\$ (1,660)	\$ 1,995	\$ 1,163
State	471	557	114
Foreign	1,176	13,448	107,487
	(13)	16,000	108,764
Deferred and other:			
Federal	(2,343)	(407)	26,334
State	(1,605)	516	(489)
Foreign	(24,623)	(9,886)	(20,414)
	(28,571)	(9,777)	5,431
Provision for (benefit from) income taxes	\$(28,584)	\$ 6,223	\$114,195

The components of income from continuing operations before income taxes consist of (in thousands):

	Fiscal		
	2020	2019	2018
United States	\$ (98,900)	\$54,480	\$ 65,272
Foreign	(343,823)	5,568	296,283
Income (loss) from continuing operations before income taxes $.$	\$(442,723)	\$60,048	\$361,555

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES (Continued)

The reconciliation of the income tax expense (benefit) at the U.S. Federal statutory rate (21.0% in fiscal 2020, 21.0% in fiscal 2019, and 24.5% in fiscal 2018) to actual income tax expense is as follows (in thousands):

	Fiscal		
	2020	2019	2018
Federal statutory tax expense (benefit)	\$(92,972)	\$12,610	\$ 88,684
Valuation allowance	15,231	7,925	4,263
Taxes on foreign earnings at rates greater (less) than U.S. rates,			
net	(27,041)	(8,210)	8,417
Stock-based compensation	3,640	556	(8,536)
State income taxes, net of federal income tax benefit	(1,249)	1,131	(373)
Research and development credit	(4,350)	(3,665)	(6,972)
Deferred compensation	(564)	(206)	(560)
Release of unrecognized tax benefits	(20,027)	(6,688)	(352)
Release of interest accrued for unrecognized tax benefits	(4,232)	(205)	(156)
Reversal of competent authority	8,552	_	_
U.S. tax reform impact	_	_	26,653
Deferred taxes on foreign earnings	1,303	1,215	_
Write-off of withholding tax credits	_	1,134	_
Goodwill impairment	89,962	_	_
Other, net	3,163	626	3,127
Provision for (benefit from) income taxes	\$(28,584)	\$ 6,223	\$114,195
Effective tax rate	6.5%	10.4%	31.6%

Our effective tax rate on loss from continuing operations before income taxes for fiscal 2020 of 6.5% was lower than the U.S. federal tax rate of 21.0%. Our effective tax rate benefit for fiscal 2020 was unfavorably impacted primarily due to the impairment of goodwill that is not deductible for tax purposes and the establishment of valuation allowances for certain deferred tax assets. These unfavorable impacts were partially offset primarily from the release of unrecognized tax benefits net of settlements and competent authority offsets and losses in foreign jurisdictions subject to tax rates that are higher than the U.S. tax rates.

The effective tax rate on income from continuing operations before income taxes for fiscal 2019 of 10.4% was lower than the U.S. federal tax rate of 21.0% primarily due to the tax benefit from losses of our German subsidiaries, which are subject to higher tax rates than U.S. tax rates, adjustments related to the Tax Act's transition tax, the net excess tax benefits from restricted stock unit vesting, the benefit of federal research and development tax credits and our Singapore and South Korea tax exemptions. These amounts are partially offset by an accrual for foreign withholding taxes on certain current year foreign earnings not considered permanently reinvested, stock-based compensation not deductible for tax purposes and limitations on the deductibility of compensation under Internal Revenue Code Section 162(m).

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was enacted and signed into law. U.S. GAAP rules require recognition of the tax effects of new legislation during the reporting period that includes the enactment date. The tax relief measures for businesses include a five-year net operating loss ("NOL") carryback for any NOL generated in a taxable year beginning after December 31, 2017 and before January 1, 2021, suspension of the 80% limitation of NOL utilization for taxable years beginning before 2021, changes in the deductibility of interest, acceleration of alternative minimum tax credit refunds, payroll tax relief, and technical corrections allowing accelerated deductions for

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES (Continued)

qualified improvement property. The CARES Act also provided other non-tax benefits, including employee retention credits, to assist businesses impacted by the pandemic. There is no material impact of the tax benefits under the CARES Act on our consolidated financial statements.

Coherent Singapore made an additional capital contribution to Coherent Korea in 2019 to take advantage of the High-Tech tax exemption provided by the Korean authorities. The High-Tech tax exemption is effective retroactively to the beginning of fiscal 2019 and the amount was used entirely in that year. There was no additional benefit available for fiscal 2020. For fiscal 2019, the tax exemption decreased Coherent Korea income taxes by approximately \$2.4 million and the benefit of the tax holiday on net income (loss) per diluted share was \$0.10.

In October 2016, Coherent Singapore received an amended Pioneer Status tax exemption from the Singapore authorities effective from fiscal 2012 through fiscal 2021. The tax holiday continues to be conditional upon our meeting certain revenue, business spending and employment thresholds. The impact of this tax exemption decreased Coherent Singapore income taxes by approximately \$2.6 million, \$3.9 million, and \$2.5 million in fiscal 2020, fiscal 2019, and fiscal 2018, respectively. The benefits of the tax holiday on net income (loss) per diluted share were \$0.11, \$0.16, and \$0.10, respectively.

Fiscal year-end

The significant components of deferred tax assets and liabilities were (in thousands):

	Fiscal y	ear-ena
	2020	2019
Deferred tax assets:		
Reserves and accruals not currently deductible	\$ 28,520	\$ 24,069
Operating loss carryforwards and tax credits	83,447	71,890
Deferred revenue	4,412	986
Depreciation and amortization	14,362	_
Stock-based compensation	4,906	5,649
Competent authority offset to transfer pricing tax reserves	4,283	10,585
Accumulated translation adjustment	2,508	5,459
Retirement and pension	17,982	16,618
Lease liabilities	21,737	_
Other	165	4,423
Total gross deferred tax assets	182,322	139,679
Valuation allowance	(57,707)	(41,491
Total net deferred tax assets	124,615	98,188
Deferred tax liabilities:		
Depreciation and amortization	_	23,625
Deferred tax liabilities on foreign earnings	16,055	14,603
Inventory capitalization	1,394	734
Right of use assets	20,859	_
Total gross deferred tax liabilities	38,308	38,962
Net deferred tax assets	\$ 86,307	\$ 59,226

In determining our fiscal 2020 and 2019 tax provisions under ASC 740, we calculated the deferred tax assets and liabilities for each separate tax entity. We then considered a number of factors including the positive

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES (Continued)

and negative evidence regarding the realization of our deferred tax assets to determine whether a valuation allowance should be recognized with respect to our deferred tax assets. We determined that a valuation allowance was appropriate for a portion of the deferred tax assets of our California and certain state research and development tax credits, foreign tax attributes and foreign net operating losses at fiscal 2020 and 2019 year-ends.

During fiscal 2020, we increased our valuation allowance on deferred tax assets by \$16.2 million to \$57.7 million, primarily due to the net operating losses generated from certain foreign entities and California research and development tax credits, which are not expected to be recognized. At October 3, 2020, we had U.S. federal deferred tax assets related to research and development credits, foreign tax credits and other tax attributes that can be used to offset federal taxable income in future periods. These credit carryforwards will expire if they are not used within certain time periods. Management determined that there is sufficient positive evidence to conclude that it is more likely than not that sufficient taxable income will exist in the future allowing us to recognize these deferred tax assets.

The net deferred tax asset is classified on the consolidated balance sheets as follows (in thousands):

	r iscai ye	ear-enu
	2020	2019 \$ 87,011 (27,785)
Non-current deferred income tax assets	\$102,028	\$ 87,011
Non-current deferred income tax liabilities	(15,721)	(27,785)
Net deferred tax assets	\$ 86,307	\$ 59,226

We have various tax attribute carryforwards which include the following:

- Foreign gross net operating loss carryforwards are \$114.2 million, of which \$87.1 million have no expiration date and \$27.2 million have various expiration dates beginning in fiscal 2021. Among the total of \$114.2 million foreign net operating loss carryforwards, a valuation allowance of \$104.3 million has been provided for certain jurisdictions since the recovery of the carryforwards is uncertain. U.S. federal and certain state gross net operating loss carryforwards are \$11.8 million and \$30.7 million, respectively, which were acquired from our acquisitions. A full valuation allowance against certain state net operating losses of \$30.7 million has been recorded.
- U.S. federal R&D credit carryforwards of \$38.7 million are scheduled to expire beginning in fiscal 2025. California R&D credit carryforwards of \$34.0 million have no expiration date. A total of \$28.8 million valuation allowance, before U.S. federal benefit, has been recorded against California R&D credit carryforwards of \$34.0 million since the recovery of the carryforwards is uncertain. Other states R&D credit carryforwards of \$3.6 million are scheduled to expire beginning in fiscal 2021. A valuation allowance totaling \$1.9 million, before U.S. federal benefit, has been recorded against certain state R&D credit carryforwards of \$3.6 million since the recovery of the carryforwards is uncertain.
- U.S. federal foreign tax credit carryforwards of \$53.4 million are scheduled to expire beginning in fiscal 2022.

We are subject to taxation and file income tax returns in the U.S. federal jurisdiction and in many state and foreign jurisdictions. Our most significant tax jurisdictions are the U.S. and Germany. For U.S. federal and German income tax purposes, all years prior to fiscal 2017 and 2011, respectively, are closed to examination. In our other major foreign jurisdictions and our major state jurisdictions, the years prior to fiscal 2014 and 2016, respectively, are closed. Earlier years in our various jurisdictions may remain open for adjustment to the extent that we have tax attribute carryforwards from those years.

In November 2018, Coherent Korea Ltd. received a tax audit notice for fiscal 2016. The audit began in December 2018. The South Korean tax authorities also performed an audit focused on intercompany transfer

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES (Continued)

pricing arrangements for fiscal 2014, 2015, and 2017. In May 2019, the South Korean tax authorities issued transfer pricing assessments for taxes, royalties, and sales commissions. We are in the process of appealing and contesting these assessments through the Competent Authority process between South Korea, Germany, and the United States. Accordingly, there is no change to our tax reserves at the time of filing of this annual report. We are continuing to monitor and evaluate this situation. In October 2020, the South Korean tax authorities advised us that they are performing an internal review of our initial and second High-Tech tax exemptions approved in fiscal 2013 and 2016, respectively. The tax authorities requested information to further substantiate the timing of the benefits of our exemptions and this review is currently ongoing.

In Germany, various Coherent and legacy Rofin entities are under audit for the years 2011 through 2016. The timing and the resolution of income tax examinations is highly uncertain, and the amounts ultimately paid, if any, upon resolution of the issues raised by the taxing authorities may differ materially from the amounts accrued for each year. Management believes that it has adequately provided for any adjustments that may result from tax examinations. We regularly engage in discussions and negotiations with tax authorities regarding tax matters in various jurisdictions. Although the timing of resolution, settlement, and closure of audits is not certain, we do not believe it is reasonably possible that our unrecognized tax benefits will materially change in the next 12 months.

A reconciliation of the change in gross unrecognized tax benefits, excluding interest and penalties, is as follows (in thousands):

	Fiscal year-end			
	2020	2019	2018	
Balance as of the beginning of the year	\$ 58,111	\$65,882	\$47,566	
Tax positions related to current year:				
Additions	1,410	605	19,033	
Tax positions related to prior year:				
Additions	86	448	117	
Reductions	(17)	(6,071)	_	
Lapses in statutes of limitations	(1,211)	(639)	(700)	
Decrease in unrecognized tax benefits based on settlement	(19,463)	_	_	
Foreign currency revaluation adjustment	591	(2,114)	(134)	
Balance as of end of year	\$ 39,507	\$58,111	\$65,882	

As of October 3, 2020, the total amount of gross unrecognized tax benefits including gross interest and penalties was \$42.4 million, of which \$31.2 million, if recognized, would affect our effective tax rate. In March 2020, German tax authorities completed their transfer pricing audits for certain legacy-Rofin German entities for fiscal 2013 through 2016. As a result, we released tax reserves of \$17.3 million and reversed deferred tax assets of \$8.7 million related to the competent authority offsets associated with the transfer pricing adjustments. In addition, legacy-Rofin U.S. audits for fiscal 2014 through 2016 were completed in fiscal 2020 and we recorded a benefit of \$1.6 million. Our total gross unrecognized tax benefit, net of certain deferred tax assets is classified as a long-term taxes payable in the consolidated balance sheets. We include interest and penalties related to unrecognized tax benefits within the provision for income taxes. As of October 3, 2020, the total amount of gross interest and penalties accrued was \$2.9 million and it is classified as Other long-term liabilities in the consolidated balance sheets. As of September 28, 2019, we had accrued \$5.8 million for the gross interest and penalties and it is classified as Other long-term liabilities in the consolidated balance sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. INCOME TAXES (Continued)

A summary of the fiscal tax years that remain subject to examination, as of October 3, 2020, for our major tax jurisdictions is:

United States – Federal	2017 – forward
United States – Various States	2016 – forward
Netherlands	2014-forward
Germany	2011 – forward
Japan	2014-forward
South Korea	2015 – forward
United Kingdom	2018 - forward

17. DEFINED BENEFIT PLANS

As a result of the Rofin acquisition in fiscal 2017, we assumed all assets and liabilities of Rofin's defined benefit plans for the Rofin-Sinar Laser, GmbH ("RSL") and Rofin-Sinar Inc. ("RS Inc.") employees. The U.S. plan began in fiscal 1995 and is partially funded. Any new employees hired after January 1, 2007, are not eligible for the RS Inc. pension plan. As is the customary practice with German companies, the German pension plan is unfunded. Any new employees hired after 2000 are not eligible for the RSL pension plan. The measurement date of these pension plans is September 30 and actuarial gains and losses are deferred into OCI and amortized over future periods.

Effective January 1, 2012, the RS Inc. defined benefit plan was amended to exclude highly compensated employees, as defined by the Internal Revenue Service, from receiving future years of service under the RS Inc. defined benefit plan. A non-qualified defined benefit plan was created to replace the benefits lost by the employees that were otherwise excluded from the qualified defined benefit plan. Effective August 31, 2018, both the RS Inc. plans were amended to freeze all future compensation benefit accruals. During fiscal 2020, we opened a lump sum payment election window for the RS Inc. defined benefit plan to allow certain participants the option to receive the entire value of their benefit as a single lump sum payment, resulting in payments of \$1.0 million.

In addition, we have defined benefit plans in South Korea, Japan, Spain, and Italy, covering all full-time employees with at least one year of service, and a defined benefit plan in Germany covering two individuals. 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. We have elected to recognize all actuarial gains and losses on these plans immediately, as incurred. The measurement date of these defined benefit plans is September 30.

For financial reporting purposes, the calculation of net periodic pension costs is based upon a number of actuarial assumptions including a discount rate for plan obligations, an assumed rate of return on pension assets and an assumed rate of compensation increase for employees covered by the plan. 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. DEFINED BENEFIT PLANS (Continued)

Components of net periodic cost are as follows for fiscal 2020, 2019, and 2018 (in thousands):

	Fiscal		
	2020	2019	2018
Service cost	\$2,153	\$1,955	\$ 2,262
Interest cost	857	1,308	1,230
Expected return on plan assets	(682)	(817)	(787)
Recognized net actuarial (gain) loss	(690)	470	240
Foreign exchange impacts	66	(79)	(56)
Recognition of curtailment gain due to plan freeze	_	_	(1,236)
Net periodic pension cost	\$1,704	\$2,837	\$ 1,653

The service cost component of net periodic costs is included in selling, general and administrative ("SG&A") expenses, and the interest costs, net actuarial (gain) loss and other components are included in Other-net within other income (expense) in the consolidated statements of operations.

The changes in projected benefit obligations and plan assets, as well as the ending balance sheet amounts for our defined benefit plans, are as follows (in thousands):

	Fiscal 2020	Fiscal 2019
Change in benefit obligation:		
Projected benefit obligation at beginning of year	\$ 60,437	\$ 51,499
Service cost	2,153	1,955
Interest cost	857	1,308
Assumption change	(1,783)	9,505
Experience (gain) loss	22	(308)
Foreign exchange rate impacts	2,433	(1,889)
Benefits paid – total	(3,010)	(1,633)
Settlement gain	(502)	
Projected benefit obligation at end of year	<u>\$ 60,607</u>	\$ 60,437
Projected benefit obligation at end of year:		
U.S. plans	\$ 18,775	\$ 18,892
Foreign plans	41,832	41,545
Projected benefit obligation at end of year	\$ 60,607	\$ 60,437
Change in plan assets:		
Fair value of plan assets at beginning of year	\$ 12,997	\$ 12,486
Actual return on plan assets	1,218	539
Employer contributions	208	455
Benefits paid – funded plan	(1,522)	(483)
Fair value of plan assets at end of year	\$ 12,901	\$ 12,997
Fair value of plan assets at end of year:		
U.S. plans	\$ 12,645	\$ 12,766
Foreign plans	256	231
Fair value of plan assets at end of year	12,901	12,997
Unfunded status at end of year	\$(47,706)	\$(47,440)
Amounts recognized in the consolidated balance sheet:		
Accrued benefit liability – current	\$ (1,896)	\$ (1,578)
Accrued benefit liability – non current	(45,810)	(45,862)
Accumulated other comprehensive (gain) loss (pre-tax)	456	2,590

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. DEFINED BENEFIT PLANS (Continued)

The information for plans with an accumulated benefit obligation in excess of plan assets is as follows (in thousands):

	Fiscal year-end	
	2020	2019
Projected benefit obligation	\$60,607	\$60,437
Accumulated benefit obligation	56,847	55,941
Fair value of plan assets	12,901	12,997

The weighted-average rates used to determine the net periodic benefit costs are as follows:

	Fiscal 2020	Fiscal 2019
Discount rate:		
U.S	2.3%	3.0%
Foreign	1.2%	0.8%
Expected return on plan assets:		
U.S	5.0%	5.8%
Rate of compensation increase		
U.S		%
Foreign	2.2%	2.1%

We recognize the over (under) funded status of the defined benefit plans in our consolidated balance sheets. We also recognize, in other comprehensive income (loss), certain gains and losses that arise for the period but are deferred under current pension accounting rules. A one percent change in the discount rate or the expected rate of return on plan assets would not have a material impact on the projected benefit obligation or the net periodic benefit cost. The decrease in discount rates for U.S. and foreign plans was the primary reason for the assumption change and the increase in the projected benefit obligation.

Expected benefit payments for each of the next five fiscal years and the five years aggregated thereafter is as follows (in thousands):

	Amount
2021	\$ 2,597
2022	3,009
2023	2,492
2024	2,863
2025	2,942
2026 – 2030	16,329
Total	\$30,232

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. DEFINED BENEFIT PLANS (Continued)

Our pension plan asset allocations at October 3, 2020 and September 28, 2019 by asset category are as follows:

	Allocation		
	Target	Fiscal 2020	Fiscal 2019
Equity securities	30%	32%	33%
Debt securities	70%	68%	67%
Total plan assets	100%	100%	100%

We employ a total return investment approach whereby a mix of equity, debt securities and government securities are used to maximize the long-term return of plan assets for a prudent level of risk. The intent of this strategy is to minimize plan expenses by maximizing investment returns within that prudent level of risk. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks as well as growth, value and small and large capitalizations. Additionally, cash balances are maintained at levels adequate to meet near-term plan expenses and benefit payments. Investment risk is measured and monitored on an ongoing basis through semi-annual investment portfolio reviews.

Investments in our defined benefit plan are stated at fair value. Level 1 assets are valued using quoted market prices that represent the asset value of the shares held by the trusts. The level 2 assets are investments in pooled funds, which are valued using a model to reflect the valuation of their underlying assets that are publicly traded with observable values. The fair value of level 3 pension plan assets are measured by compiling the portfolio holdings and independently valuing the securities in those portfolios.

The fair values of our pension plan assets, by level within the fair value hierarchy, at October 3, 2020 are as follows:

Asset categories	Level 1	Level 2	Level 3	Total
Cash and cash equivalents:				
Money market	\$469	\$ —	\$ —	\$ 469
Equity securities:				
Small cap	_	50	_	50
Mid cap	_	143	_	143
Large cap	_	293	_	293
Total market stock	_	2,140		2,140
International	_	1,166	_	1,166
Emerging markets	_	197	_	197
Debt securities:				
Bonds and mortgages	_	3,323	_	3,323
Inflation protected	_	_	_	_
High yield	_	272	_	272
Liability driven investments	_	4,848	_	4,848
Total plan assets	\$469	\$12,432	\$	\$12,901

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. DEFINED BENEFIT PLANS (Continued)

The fair values of our pension plan assets, by level within the fair value hierarchy, at September 28, 2019 are as follows:

Asset categories	Level 1	Level 2	Level 3	Total
Cash and cash equivalents:				
Money market	\$503	\$ —	\$ —	\$ 503
Equity securities:				
Small cap	_	135	_	135
Mid cap		250	_	250
Large cap		751	_	751
Total market stock	_	1,689	_	1,689
International	_	1,276	_	1,276
Emerging markets	_	204	_	204
Debt securities:				
Bonds and mortgages	_	3,110	_	3,110
Inflation protected	_	634		634
High yield	_	634	_	634
Liability driven investments	_	\$ 3,811	_	3,811
Total plan assets	\$503	\$12,494	<u>\$ </u>	\$12,997

18. SEGMENT AND GEOGRAPHIC INFORMATION

At October 3, 2020, we were organized into two reporting segments, OLS and ILS, based upon our organizational structure and how the CODM receives and utilizes information provided to allocate resources and make decisions. This segmentation reflects the go-to-market strategies and synergies for our broad portfolio of laser technologies and products. While both segments deliver cost-effective, highly reliable photonics solutions, the OLS business segment is focused on high performance laser sources and complex optical sub-systems, typically used in microelectronics manufacturing, medical diagnostics, and therapeutic applications, as well as in scientific research. Our ILS business segment delivers high performance laser sources, sub-systems, and tools primarily used for industrial laser materials processing, serving important end markets like automotive, machine tools, consumer goods, and medical device manufacturing.

We have identified OLS and ILS as operating segments for which discrete financial information is available. Both units have dedicated engineering, manufacturing, product business management, and product line management functions. A small portion of our outside revenue is attributable to projects and recently developed products for which a segment has not yet been determined. The associated direct and indirect costs are presented in the category of Corporate and other, along with other corporate costs as described below.

Our Chief Executive Officer has been identified as the CODM, as he assesses the performance of the segments and decides how to allocate resources to the segments. Income (loss) from continuing operations is the measure of profit and loss that our CODM uses to assess performance and make decisions. Assets by segment are not a measure used to assess the performance of the company by the CODM and thus are not reported in our disclosures. Income (loss) from continuing operations represents the net sales less the cost of sales and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared sales and manufacturing costs. We do not allocate certain operating expenses to our operating segments and we manage them at the corporate level. These unallocated costs include stock-based

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. SEGMENT AND GEOGRAPHIC INFORMATION (Continued)

compensation and corporate functions (certain research and development, management, finance, legal, and human resources) and are included in the results below under Corporate and other in the reconciliation of operating results. Management does not consider unallocated Corporate and other costs in its measurement of segment performance.

The following table provides net sales and income (loss) from continuing operations for our operating segments and a reconciliation of our total income (loss) from continuing operations to income (loss) from continuing operations before income taxes (in thousands):

	Fiscal				
	2020	2019	2018		
Net sales:					
OEM Laser Sources	\$ 758,929	\$ 886,676	\$1,259,477		
Industrial Lasers & Systems	470,070	543,964	643,096		
Total net sales	\$1,228,999	\$1,430,640	\$1,902,573		
Income (loss) from continuing operations:					
OEM Laser Sources	\$ 169,883	\$ 239,073	\$ 469,835		
Industrial Lasers & Systems ⁽¹⁾	(518,186)	(93,133)	(3,687)		
Corporate and other	(81,877)	(62,845)	(73,131)		
Total income (loss) from continuing operations	(430,180)	83,095	393,017		
Total other expense, net	(12,543)	(23,047)	(31,462)		
Income (loss) from continuing operations before income taxes	\$ (442,723)	\$ 60,048	\$ 361,555		

⁽¹⁾ The fiscal 2020 loss includes non-cash pre-tax goodwill impairment charges of \$327.2 million as well as non-cash pre-tax charges related to the impairment of intangible assets, property, plant and equipment and ROU assets of \$33.9 million, \$85.6 million, and \$1.8 million, respectively. See Note 8, "Goodwill and Intangible Assets" in the Notes to Consolidated Financial Statements and Note 11, "Leases" in the Notes to Consolidated Financial Statements under Item 8 of this annual report.

Geographic Information

Our foreign operations consist primarily of manufacturing facilities and sales offices in Europe and Asia-Pacific. Sales, marketing, and customer service activities are conducted through sales subsidiaries throughout the world. Geographic sales information for fiscal 2020, 2019, and 2018 is based on the location of the end customer. Geographic long-lived asset information presented below is based on the physical location of the assets at the end of each year.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. SEGMENT AND GEOGRAPHIC INFORMATION (Continued)

Sales to unaffiliated customers are as follows (in thousands):

				Fiscal		
SALES		2020		2019		2018
United States	\$	296,102	\$	339,585	\$	309,495
Foreign countries:	-					
South Korea		247,461		313,461		652,313
China		196,824		194,653		235,568
Japan		94,068		138,028		180,223
Asia-Pacific, other		94,835		93,389		124,733
Germany		117,170		145,285		166,926
Europe, other		125,739		148,680		171,936
Rest of World		56,800		57,559		61,379
Total foreign countries sales	-	932,897	1	,091,055		1,593,078
Total sales	\$1	,228,999	\$1	,430,640	\$1	1,902,573

Long-lived assets, which include all non-current assets other than goodwill, intangibles, non-current restricted cash, our investment in 3D-Micromac AG and deferred taxes, by geographic region, are as follows (in thousands):

		ear-end
LONG-LIVED ASSETS	2020	2019
United States	\$170,412	\$151,640
Foreign countries:		
Germany	123,019	152,529
Europe, other	35,810	29,815
Asia-Pacific	56,125	39,977
Total foreign countries long-lived assets	214,954	222,321
Total long-lived assets	\$385,366	\$373,961

Major Customers

We had one major customer who accounted for 17.2%, 16.8%, and 25.8% of consolidated revenue during fiscal 2020, 2019, and 2018, respectively. The customer purchased primarily from our OLS segment.

19. RESTRUCTURING CHARGES

In the first quarter of fiscal 2017, we began the implementation of planned restructuring activities in connection with the acquisition of Rofin. The activities under this plan primarily related to the exiting of our legacy HPFL product line, change of control payments to Rofin officers, the exiting of two product lines acquired in the acquisition of Rofin, realignment of our supply chain due to segment reorganization, and consolidation of sales and distribution offices as well as certain manufacturing sites. These activities resulted in charges primarily for employee termination, other exit related costs associated with the write-off of property and equipment and inventory, and early lease termination costs.

In June 2019, we announced our plans to exit a portion of our HPFL business and consolidate all HPFL manufacturing and engineering functions in our Tampere, Finland facility by transferring certain

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. RESTRUCTURING CHARGES (Continued)

HPFL activities from our Hamburg, Germany facility. In conjunction with this announcement, we recorded charges in the third and fourth quarters of fiscal 2019 totaling \$19.7 million primarily related to write-offs of excess inventory, which is recorded in cost of sales, and estimated severance. We recorded charges in fiscal 2020 of \$1.1 million, primarily related to accelerated depreciation and project management consulting.

We also vacated our leased facility in Santa Clara at the end of the lease term on July 31, 2020 and combined operations into our owned Santa Clara headquarters. We did not incur material expenses in fiscal 2019 related to this project. We incurred costs in fiscal 2020 of \$1.5 million, primarily related to accelerated depreciation. We also incurred costs in fiscal 2020 of \$0.1 million for other projects.

In the fourth quarter of fiscal 2020, we began a restructuring program in our ILS segment which includes management reorganizations, the planned closure of certain manufacturing sites, and the right-sizing of global sales, service, order admin, marketing communication and certain administrative functions, among others. In the fourth quarter of fiscal 2020, we incurred costs of \$2.6 million, primarily related to severance.

The following table presents our current liability as accrued on our balance sheets for restructuring charges. The table sets forth an analysis of the components of the restructuring charges and payments and other deductions made against the accrual for fiscal 2020 and fiscal 2019 (in thousands):

	Severance Related	Asset Write-Offs	Other	Total
Balances, September 29, 2018	\$ 836	\$ —	\$ 286	\$ 1,122
Provision	9,172	12,609	940	22,721
Payments and other	(1,729)	(12,609)	(1,011)	(15,349)
Balances, September 28, 2019	8,279	_	215	8,494
Provision	2,468	2,194	629	5,291
Payments and other	(8,136)	(2,194)	(614)	(10,944)
Balances, October 3, 2020	\$ 2,611	<u> </u>	\$ 230	\$ 2,841

At October 3, 2020, \$2.8 million of accrued severance related and other costs were included in other current liabilities. The asset write-offs for accelerated depreciation and other costs in fiscal 2020 primarily related to the exit of a portion of our HPFL business in Hamburg, Germany, and costs to vacate our leased facility in Santa Clara and combine operations into our owned Santa Clara headquarters. The severance related costs in fiscal 2020 primarily related to the restructuring program that began in the fourth quarter of fiscal 2020. The severance related, asset write-offs of inventory and other costs in fiscal 2019 primarily related to the exit of a portion of our HPFL business in Hamburg, Germany. The severance related, asset write-offs of inventory and other costs in fiscal 2019 other than those related to the exit of a portion of our HPFL business in Hamburg, Germany primarily related to the consolidation of certain manufacturing sites

By segment, \$3.9 million and \$21.9 million of restructuring costs were incurred in the ILS segment and \$1.4 million and \$0.8 million were incurred in the OLS segment in fiscal 2020 and 2019, respectively. Restructuring charges are recorded in cost of sales, research and development and selling, general and administrative expenses in our consolidated statements of operations.

QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Summarized quarterly financial data for the years ended October 3, 2020 and September 28, 2019 are as follows (in thousands, except per share amounts):

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter			
Fiscal 2020:										
Net sales	\$320,771		\$320,771 \$ 293,147		7 \$298,330		\$3	16,751		
Gross profit	109,253		94,111		95,277		112,233			
Net income (loss)	5,793		5,793		5,793 (418,913)		(8,708)		7,689	
Net income (loss) per basic share	\$	0.24	\$	(17.39)	\$	(0.36)	\$	0.32		
Net income (loss) per diluted share	\$	0.24	\$	(17.39)	\$	(0.36)	\$	0.32		
Fiscal 2019:										
Net sales	\$38	33,146	\$ 3	372,860	\$3	39,170	\$3.	35,464		
Gross profit	149,350		130,717		130,717 98		10	08,395		
Net income (loss)	35,550			20,750		(3,099)		624		
Net income (loss) per basic share	\$	1.46	\$	0.86	\$	(0.13)	\$	0.03		
Net income (loss) per diluted share	\$	1.45	\$	0.85	\$	(0.13)	\$	0.03		

STATEMENT OF MANAGEMENT RESPONSIBILITY

Management is responsible for the preparation, integrity, and objectivity of the Consolidated Financial Statements and other financial information included in the Company's 2020 Annual Report on Form 10-K. The Consolidated Financial Statements have been prepared in conformity with U.S. generally accepted accounting principles and reflect the effects of certain estimates and judgments made by management. It is critical for investors and other readers of the Consolidated Financial Statements to have confidence that the financial information that we provide is timely, complete, relevant and accurate.

Management, with oversight by the Company's Board of Directors, has established and maintains a corporate culture that requires that the Company's affairs be conducted to the highest standards of business ethics and conduct. Management also maintains a system of internal controls that is designed to provide reasonable assurance that assets are safeguarded and that transactions are properly recorded and executed in accordance with management's authorization. This system is regularly monitored through direct management review, as well as extensive audits conducted by internal auditors throughout the organization.

Our Consolidated Financial Statements as of and for the year ended October 3, 2020 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm. Their audit was conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States) and included an integrated audit under such standards.

The Audit Committee of the Board of Directors meets regularly with management, the internal auditors and the independent registered public accounting firm to review accounting, reporting, auditing and internal control matters. The Audit Committee has direct and private access to both internal and external auditors.

See Item 9A for Management's Report on Internal Control Over Financial Reporting.

We are committed to enhancing shareholder value and fully understand and embrace our fiduciary oversight responsibilities. We are dedicated to ensuring that our high standards of financial accounting and reporting as well as our underlying system of internal controls are maintained. Our culture demands integrity and we have the highest confidence in our processes, internal controls, and people, who are objective in their responsibilities and operate under the highest level of ethical standards.

/s/ ANDREAS W. MATTES
Andreas W. Mattes

President and Chief Executive Officer

/s/ KEVIN S. PALATNIK

Kevin S. Palatnik

Executive Vice President and Chief Financial Officer

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Management's Evaluation of Disclosure Controls and Procedures

We have evaluated the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as of the end of the period covered by this annual report ("Evaluation Date"). The controls evaluation was conducted under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of the Evaluation Date that our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended, is (i) recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (ii) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures.

Management's Report on Internal Control Over Financial Reporting

Management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company.

Management assessed the effectiveness of our internal control over financial reporting as of October 3, 2020, utilizing the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control-Integrated Framework (2013). Based on the assessment by management, we determined that our internal control over financial reporting was effective as of October 3, 2020. The effectiveness of our internal control over financial reporting as of October 3, 2020 has been audited by Deloitte & Touche LLP, our independent registered public accounting firm, as stated in their report which appears below.

Inherent Limitations Over Internal Controls

Management, including our CEO and CFO, does not expect that our internal controls will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of internal controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Also, any evaluation of the effectiveness of controls in future periods are subject to the risk that those internal controls may become inadequate because of changes in business conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the three months ended October 3, 2020.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Coherent, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Coherent, Inc. and subsidiaries (the "Company") as of October 3, 2020, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 3, 2020, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended October 3, 2020, of the Company and our report dated December 1, 2020, expressed an unqualified opinion on those consolidated financial statements and included an explanatory paragraph related to the Company's change in method of accounting for leases in fiscal year 2020 due to adoption of Financial Accounting Standards Board ("FASB") Topic 842, *Leases*.

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/ DELOITTE & TOUCHE LLP

San Jose, California December 1, 2020

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding (i) our directors will be set forth under the caption "Proposal One — Election of Directors — Nominees," (ii) compliance with Section 16(a) of the Securities Act of 1933, as amended, will be set forth under the caption "Delinquent Section 16(a) Reports," if applicable, (iii) the process for stockholders to nominate directors will be set forth under the caption "Proposal One — Election of Directors — Process for Recommending Candidates for Election to the Board of Directors," (iv) our audit committee and audit committee financial expert will be set forth under the caption "Proposal One — Election of Directors — Board Meetings and Committees — Audit Committee" and (v) our executive officers will be set forth under the caption "Our Executive Officers" in our proxy statement for use in connection with our upcoming Annual Meeting of Stockholders to be held in 2021 (the "2021 Proxy Statement") and is incorporated herein by reference or will be included in a Form 10-K/A as an amendment to this Form 10-K. The 2021 Proxy Statement or Form 10-K/A will be filed with the SEC within 120 days after the end of our fiscal year.

Business Conduct Policy

We have adopted a worldwide Business Conduct Policy that applies to the members of our Board of Directors, executive officers and other employees. This policy is posted on our Website at www.coherent.com and may be found as follows:

- 1. From our main Web page, first click on "Company".
- 2. Next, click on "Business Conduct Policy".

We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding an amendment to, or waiver from, a provision of this Business Conduct Policy by posting such information on our Website, at the address and location specified above.

Stockholders may request free printed copies of our worldwide Business Conduct Policy from:

Coherent, Inc. Attention: Investor Relations 5100 Patrick Henry Drive Santa Clara, California 95054

ITEM 11. EXECUTIVE COMPENSATION

Information regarding (i) executive officer and director compensation will be set forth under the captions "Election of Directors — Director Compensation" and "Executive Officers and Executive Compensation" and (ii) compensation committee interlocks will be set forth under the caption "Executive Officers and Executive Compensation — Compensation Committee Interlocks and Insider Participation and Committee Independence" in our 2021 Proxy Statement and is incorporated herein by reference or will be included in a Form 10-K/A as an amendment to this Form 10-K.

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

Information regarding (i) equity compensation plan information will be set forth under the caption "Equity Compensation Plan Information" and (ii) security ownership of certain beneficial owners and management will be set forth under the caption "Security Ownership of Certain Beneficial Owners and Management" in our 2021 Proxy Statement and is incorporated herein by reference or will be included in a Form 10-K/A as an amendment to this Form 10-K.

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

The information required under this item will be set forth under the caption "Certain Relationships and Related Party Transactions" in our 2021 Proxy Statement and is incorporated herein by reference or will be included in a Form 10-K/A as an amendment to this Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item will be included under the caption "Ratification of the Appointment of Deloitte & Touche LLP as Independent Registered Public Accounting Firm-Principal Accounting Fees and Services" in our 2021 Proxy Statement and is incorporated herein by reference or will be included in a Form 10-K/A as an amendment to this Form 10-K.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

1. Consolidated Financial Statement Schedules

Financial statement schedules have been omitted because they are either not required, not applicable or the information required to be set forth therein is included in the Consolidated Financial Statements hereto.

2. Exhibits

EXHIBIT INDEX

		Incorporated by reference herein					
Exhibit Numbers		Form	Exhibit No.	Filing Date	File No.		
3.1	Restated and Amended Certificate of Incorporation	10-K	3.1	December 28, 1990	000-05255		
3.2	Certificate of Amendment of Restated and Amended Certificate of Incorporation of Coherent, Inc.	10-K	3.2	December 18, 2002	000-05255		
3.3	Bylaws of Coherent, Inc. as amended and restated on January 28, 2018	8-K	3.1	January 31, 2018	001-33962		
4.1	Description of Capital Stock	10-K	4.1	November 26, 2019	001-33962		
10.1^{\ddagger}	Form of Indemnification Agreement	10-K	10.18	December 15, 2010	001-33962		
10.2‡	Amended and Restated Employee Stock Purchase Plan	S-8	10.1	June 12, 2012	333-182074		
10.3 [‡]	Change of Control and Leadership Change Severance Plan, as amended and restated effective April 13, 2019	10-Q	10.1	May 8, 2019	001-33962		
10.4^{\ddagger}	Variable Compensation Plan, as amended	10-K	10.7	November 30, 2011	001-33962		
10.5‡	Supplementary Retirement Plan	10-Q	10.5	May 10, 2006	000-05255		
10.6^{\ddagger}	2005 Deferred Compensation Plan	10 - Q	10.1	February 8, 2012	001-33962		
10.7^{\ddagger}	2011 Equity Incentive Plan	S-8	10.1	May 6, 2011	333-174019		
10.8‡	2011 Equity Incentive Plan-Form of RSU Agreement for members of the Board of Directors	10-Q	10.1	August 10, 2011	001-33962		
10.9‡	2011 Equity Incentive Plan-Form of Option Agreement for members of the Board of Directors	10-Q	10.2	August 10, 2011	001-33962		
10.10‡	2011 Equity Incentive Plan-Form of Time-Based RSU Agreement	10-K	10.23	November 30, 2011	001-33962		
10.11‡	2011 Equity Incentive Plan-Form of Performance RSU Agreement	10-K	10.11	November 26, 2019	001-33962		
10.12‡	2011 Equity Incentive Plan-Form of Global RSU Agreement	10-K	10.12	November 27, 2018	001-33962		
10.13‡	2011 Equity Incentive Plan-Form of Global Performance RSU Agreement	10-K	10.13	November 26, 2019	001-33962		
10.14^{\ddagger}	Equity Incentive Plan	S-8	99.1	April 27, 2020	333-237855		
10.15‡	Equity Incentive Plan — Form of Global Restricted Stock Unit Agreement	10-Q	10.2	August 12, 2020	001-33962		

Exhibit			Exhibit		
Numbers		Form	No.	Filing Date	File No.
10.16 [‡]	Equity Incentive Plan — Form of Performance Restricted Stock Unit Agreement	10-Q	10.3	August 12, 2020	001-33962
10.17 [‡]	Employment Agreement dated March 31, 2020 between Andreas W. Mattes and the Company	8-K	10.1	April 6, 2020	001-33962
10.18^{\ddagger}	Offer letter with Thomas Merk	10 - Q	10.3	February 9, 2017	001-33962
10.19 [‡]	Managing director agreement with Thomas Merk	10-Q	10.4	February 9, 2017	001-33962
10.20‡	CEO Transition and Retirement Agreement, dated April 13, 2019, between the Company and John Ambroseo	10-Q	10.2	May 8, 2019	001-33962
10.21‡	Transition Agreement and Release, dated February 4, 2019, between the Company and Paul Sechrist	10-Q	10.2	February 6, 2019	001-33962
10.22^{\ddagger}	Offer letter with Kevin Palatnik	10 - Q	10.3	February 10, 2016	001-33962
10.23**	Executive Transition Services Agreement, dated August 20, 2020, between the Company and Kevin Palatnik				
10.24	Credit Agreement, dated as of November 7, 2016, by and among Coherent, Inc., Coherent Holding GmbH, the guarantors from time to time party thereto, the lenders from time to time party thereto, Barclays Bank PLC, as Administrative Agent and L/C Issuer, Bank of America, N.A., as L/C Issuer, and The Bank of Tokyo-Mitsubishi UJF, Ltd., as L/C Issuer	8-K	10.1	November 8, 2016	001-33962
10.25	Amendment No. 1 and Waiver to Credit Agreement, dated as of May 8, 2017, by and among Coherent, Inc., Coherent Holding GmbH, the Guarantors party thereto, the Lenders party thereto and Barclays Bank PLC, as Administrative Agent	8-K	10.1	May 9, 2017	001-33962
10.26	Amendment No. 2 to Credit Agreement, dated as of July 5, 2017, by and among Coherent, Inc., Coherent Holding GmbH, the Guarantors party thereto and Barclays Bank PLC as Administrative Agent	10-Q	10.2	August 9, 2017	001-33962
21.1	Subsidiaries				
23.1	Consent of Independent Registered Public Accounting Firm				
24.1	Power of Attorney (see signature page)				
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)/15d- 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)/15d- 14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				

Incorporated by reference herein

			Incorp	orated by reference herei	n
Exhibit Numbers		Form	Exhibit No.	Filing Date	File No.
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
101.INS	Inline XBRL Instance				
101.SCH	Inline XBRL Taxonomy Extension Schema				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase				
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				

[‡] Identifies management contract or compensatory plans or arrangements required to be filed as an exhibit.

^{**} Furnished herewith.

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, INC.

Date: December 1, 2020 By: /s/ ANDREAS W. MATTES

Andreas W. Mattes

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Andreas W. Mattes and Kevin S. Palatnik, and each of them individually, as his attorney-in-fact, each with full power of substitution, for him in any and all capacities to sign any and all amendments to this annual report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or his or her substitute, may do or cause to be done by virtue hereof.

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

/s/ ANDREAS W. MATTES Andreas W. Mattes (Director and Principal Executive Officer)	December 1, 2020 Date
/s/ KEVIN S. PALATNIK Kevin S. Palatnik (Principal Financial and Accounting Officer)	December 1, 2020 Date
Jay T. FLATLEY Jay T. Flatley (Director)	December 1, 2020 Date
/s/ PAMELA FLETCHER Pamela Fletcher (Director)	December 1, 2020 Date
/s/ BEVERLY KAY MATTHEWS Beverly Kay Matthews (Director)	December 1, 2020 Date
/s/ MICHAEL R. MCMULLEN Michael R. McMullen (Director)	December 1, 2020 Date
/s/ GARRY W. ROGERSON Garry W. Rogerson (Director)	December 1, 2020 Date

/s/ STEVE SKAGGS	December 1, 2020
Steve Skaggs	Date
(Director)	
/s/ SANDEEP VIJ	December 1, 2020
Sandeep Vij	Date
(Director)	

DIRECTORS AND EXECUTIVE OFFICERS OF COHERENT, INC.

Board of Directors

Garry W. Rogerson, Ph.D.

Chairman of the Board, Coherent, Inc. Former Chief Executive Officer, Advanced Energy Industries, Inc.

Andreas W. Mattes

President and Chief Executive Officer Coherent, Inc.

Jay T. Flatley

Chairman of the Board Illumina, Inc.

Pamela Fletcher

Vice President – Global Innovation General Motors Company

Beverly Kay Matthews

Partner (retired) Ernst & Young

Michael R. McMullen

President and Chief Executive Officer Agilent Technologies, Inc.

Steve Skaggs

Former Senior Vice President and Chief Financial Officer Atmel Corporation

Sandeep Vij

Former President and Chief Executive Officer MIPS Technologies, Inc.

Executive Officers

Andreas W. Mattes

President and Chief Executive Officer

Bret DiMarco

Executive Vice President, Chief Legal Officer and Corporate Secretary

Kevin Palatnik

Executive Vice President and Chief Financial Officer

Mark Sobey, Ph.D.

Executive Vice President and Chief Operating Officer

Independent Registered Public Accounting Firm

Deloitte & Touche LLP San Jose, CA

SEC Form 10-K

Form 10-K for the 2020 fiscal year was filed with the Securities and Exchange Commission on December 1, 2020, as amended by the Form 10-K/A filed on February 1, 2021. Copies will be made available without charge upon request.



INVESTOR RELATIONS

Coherent, Inc.

Investor Relations P.O. Box 54980 Santa Clara, CA 95056-0980 Telephone: (408) 764-4110

Fax: (408) 970-9998 www.coherent.com

Financial Information

Coherent invites security analysts and representatives of portfolio management firms to contact:

Kevin Palatnik Executive Vice President and Chief Financial Officer Coherent, Inc. Telephone: (408) 764-4110 Please send change of address and other correspondence to the transfer agent:

American Stock Transfer & Trust Company, LLC

6201 15th Avenue Brooklyn, NY 11219 Telephone: (800) 937-5449 info@astfinancial.com www.astfinancial.com

Annual Meeting of Stockholders

May 6, 2021, 8:30 a.m. Pacific Time www.virtualshareholdermeeting.com/COHR2021

Stock Symbol

Common Stock traded under the symbol COHR

Coherent, Inc. is an equal opportunity employer, M/F/H/V

All product names are trademarks of Coherent, Inc.

Readers are encouraged to refer to the risk disclosures described in the Company's Form 10-K, 10-K/A, 10-Q and 8-K, as applicable.

