

Annual Report, Proxy Statement & Notice of Annual Meeting

2009



DEAR SHAREHOLDERS, CUSTOMERS AND EMPLOYEES

While 2009 was an extremely challenging year for businesses, we are pleased to report that Coherent was able to advance several key initiatives to strengthen its market leadership position and further refine its operating model

Our approach to managing through 2009 was based on four interdependent elements: strengthen customer alignment, preserve core skills, manage operating costs and protect the balance sheet. The goal was to rationalize the business such that we could weather the downturn and be well positioned for a recovery. While each element is important, we particularly emphasized our customer alignment by focusing on how our customers' businesses were affected by the global financial crisis. Armed with the most current information pertaining to customers' production needs, inventory levels and new product plans, we were better positioned to determine what we would and wouldn't work on throughout fiscal 2009 – a seemingly simple concept that would largely determine how we would manage through and emerge from the downturn.

With the customer agenda set, we turned to balancing the near-term financial realities and long-term recovery dynamics. Starting in September 2008, we took the first in a series

of steps to reduce manufacturing capacity and period expenses that tracked changes in our economic outlook. The combined effect of these actions and our previously announced footprint consolidation, in which we've exited four facilities on-time and on-budget over the last two years, yielded an annual run-rate reduction in costs of approximately \$30 million by the end of fiscal 2009. In addition, we enacted a series of temporary measures including furloughs (i.e., mandatory time off), eliminating management bonuses and freezing salaries to further control short-term costs. We firmly believe this was a better option to preserve core skills rather than making further cuts that could have hampered a recovery.

Coherent's cash generation ability has grown over the past several years, and we entered fiscal 2009 with over \$220 million in cash, cash equivalents and investments, and no debt. This is an enviable position in any market, especially following the onset of the global economic crisis where a strong balance sheet gave, and continues to give confidence to customers and shareholders alike. The capital investments associated with our footprint consolidation notwithstanding, we were able to grow our cash position to more than \$243 million by the end of fiscal 2009 due to lower receivables and inventories.

The reaction to global economics in markets that we serve varied widely during fiscal 2009. With sluggish demand for consumer electronics, microelectronics customers faced stiff headwinds as factory utilization rates collapsed in the first six months of fiscal 2009. At the low point, utilization rates were 20-30% affecting not only new production orders, but service revenues as well. The trend began to reverse itself mid-year as customers needed to replenish depleted inventories, and demand from consumers picked up for certain technologies. (As an example, one active area was mobile touchscreen displays fueled by the success of smartphones such as the Apple® iPhone® as well as the pending deployment of organic light emitting displays (OLED's).) While we adjusted capacity and spending to reflect changes in the market, we continued to invest in several key programs for inspection/ metrology, solar cell and flat panel display manufacturing. Our efforts were rewarded with design wins and orders in each area that will contribute to revenues in fiscal 2010 and beyond.

After several years of impressive growth, the materials processing market was hit hard by the collapse of the credit markets as manufacturers and consumers had relied upon cheap and ubiquitous credit to finance their spending habits. Despite the short-term dynamics, materials processing remains the largest market for lasers

and one that Coherent has been historically under-represented in. That's about to change as we have unveiled a trio of solutions targeting the high-power materials processing market. Each is designed to deliver reliability, low cost of ownership and ease of use. The HighLight™ direct diode system is intended for use in low brightness applications such as cladding, heat treating and welding. The DIAMOND™ E-1000 sealed carbon dioxide laser system provides superior performance in a compact package that requires no consumables. This is a game-changer in the cutting of organics and metals with an ability to cut material at up to 2 times the speed of competitive designs. Finally, we have exhibited a prototype of a kilowatt class fiber laser based upon our diode bar technology that we believe can improve the overall cost of ownership, which is pivotal to market expansion.

The scientific market was largely unaffected in fiscal 2009 since most of the funding comes from public rather than private sources. Perhaps the biggest change in the market was money flowing from government stimulus programs. In the United States, the budgets for the National Institutes of Health and the National Science Foundation were significantly expanded for 2009 and 2010 as part of the American Recovery and Reinvestment Act of 2009. Seasonally adjusted orders in the fourth quarter of fiscal 2009 and in the first quarter of fiscal

2010 have increased as a result of this funding. In particular, our Chameleon™ platform, the leading light source for biological imaging, has posted two consecutive bookings records. While the stimulus money helps in the short term, we are continuing to enhance our product portfolio including the incorporation of our highly successful optically pumped semiconductor lasers (OPSL) into many scientific laser platforms. This will drive dual benefits of increased reliability and lower costs.

Our OEM instrumentation market was not immune to macroeconomic pressures as consumers curtailed discretionary spending on elective medical procedures such as vision correction surgery and aesthetic treatments. Health care providers responded by slowing down their capital investments. The net result was tighter inventory management throughout our customers' supply chain through much of fiscal 2009. Orders increased dramatically in our fourth fiscal quarter (September 2009) due to an improved outlook and inventory depletion. As we look at fiscal 2010 and beyond, we see several encouraging signs. The adoption of our OPSL platform in diagnostics and non-refractive ophthalmology continues to expand. Several of our customers are introducing laser-based treatments for presbyopia (i.e., the loss of ability to see things up close), which should extend the market for our ExciStar™ lasers. And

the lightshow market is experiencing a renaissance through our Taipan™ OPSL products.

The start of fiscal 2010 is vastly different from a year ago. Customer demand is improving. We've secured a number of design wins. Our portfolio has been upgraded. We have a leaner organization as a result of our consolidation and resizing efforts. We retain a rock-solid balance sheet. Our focus in fiscal 2010 will be to ramp the business to address increased demand, complete the final stage of our consolidation efforts and continue to emphasize design wins through customer alignment. We will also begin to unwind the temporary measures instituted during fiscal 2009, returning our employees to full time status and rewarding them for the work that they do on behalf of customers, the company and our shareholders.

Thank you for your continued support.

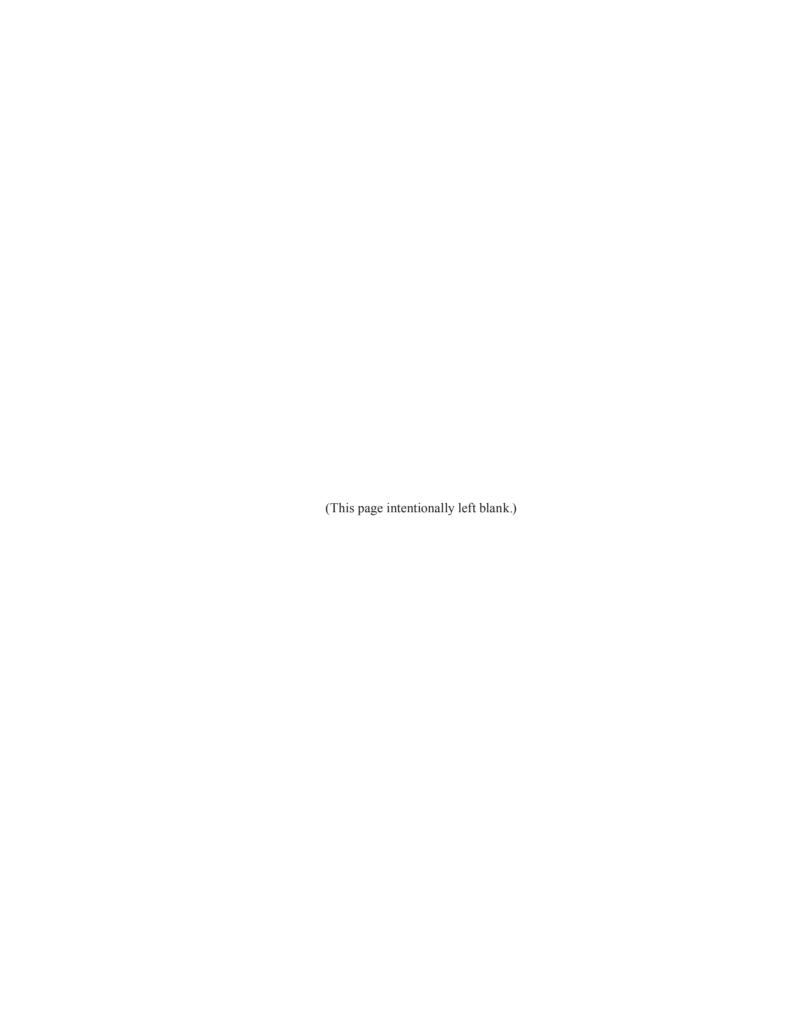
uk Juhoon

Sincerely,

John R. Ambroseo, President and

Chief Executive Officer

Garry W. Rogerson, Chairman of the Board





NOTICE OF ANNUAL MEETING OF STOCKHOLDERS April 1, 2010

TO OUR STOCKHOLDERS:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of COHERENT, INC., a Delaware corporation, will be held on April 1, 2010 at 1:00 p.m., local time, at the The Fairmont San Jose, 170 South Market Street, San Jose, CA 95113 for the following purposes:

- 1. To elect six directors to serve for the ensuing year and until their successors are duly elected (Proposal One);
- 2. To ratify the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the fiscal year ending October 2, 2010 (Proposal Two); and
- 3. 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 February 17, 2010 are entitled to notice of and to vote at the meeting.

All stockholders are cordially invited to attend the meeting. However, to assure your representation at the meeting, you are urged to mark, sign, date and return the enclosed proxy card as promptly as possible in the postage-prepaid envelope enclosed for that purpose or follow the instructions on the enclosed proxy card to vote by telephone or via the Internet. Any stockholder of record attending the meeting may vote in person even if he or she has returned a proxy. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

Sincerely,

/s/ John R. Ambroseo
John R. Ambroseo
President and Chief Executive Officer

Santa Clara, California February 22, 2010

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON APRIL 1, 2010

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

YOUR VOTE IS IMPORTANT

In order to assure your representation at the meeting, you are requested to complete, sign and date the enclosed proxy card as promptly as possible and return it in the enclosed envelope or follow the instructions on the enclosed proxy card to vote by telephone or via the Internet. Any stockholder attending the Annual Meeting may vote in person even if he or she returned a proxy card.

COHERENT, INC. 5100 PATRICK HENRY DRIVE SANTA CLARA, CALIFORNIA 95054

PROXY STATEMENT

INFORMATION CONCERNING SOLICITATION AND VOTING

General

The enclosed Proxy is solicited on behalf of the Board of Directors (the "Board") of Coherent, Inc. ("Coherent" or the "Company") for use at the Annual Meeting of Stockholders (the "Annual Meeting") to be held at The Fairmont San Jose, 170 South Market Street, San Jose, CA 95113 on April 1, 2010 at 1:00 p.m., local time, and at any adjournment(s) thereof, for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. Our telephone number is (408) 764-4000. These proxy solicitation materials were first mailed on or about February 22, 2010 to all stockholders entitled to vote at the Annual Meeting.

Record Date and Share Ownership

Stockholders of record at the close of business on February 17, 2010 (the "Record Date") are entitled to notice of and to vote at the meeting and at any adjournment(s) thereof. On the Record Date, 24,874,954 shares of our common stock, \$0.01 par value, were issued and outstanding.

Revocability of Proxies

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use (i) by delivering to us at our principal offices (Attention: Bret M. DiMarco, Corporate Secretary) a written notice of revocation or a duly executed proxy bearing a later date, (ii) in the case of a stockholder who has voted by telephone or through the Internet, by making a timely and valid telephone or Internet vote, as the case may be, or (iii) by attending the meeting and voting in person. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder, and you will need to provide a copy of such proxy at the meeting.

Attendance at the Annual Meeting

All stockholders of record as of the Record Date may attend the Annual Meeting. Please note that cameras, recording devices and other electronic devices will not be permitted at the Annual Meeting. No items will be allowed into the Annual Meeting that might pose a concern for the safety of those attending. Additionally, to attend the meeting you will need to bring identification and proof sufficient to us that you were a stockholder of record as of the Record Date or that you are a representative of a stockholder of record as of the Record Date for a stockholder of record that is not a natural person. For directions to attend the Annual Meeting, please contact Investor Relations by telephone at (408) 764-4110.

Voting and Costs of Solicitation

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

If you are a stockholder of record as of the Record Date, you may vote in person at the Annual Meeting, vote by proxy using the enclosed proxy card, vote by proxy over the telephone or vote by proxy via the Internet. *Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted.* As stated above, you may still attend the Annual Meeting and vote in person if you have already voted by proxy.

- **To vote in person:** Come to the Annual Meeting and we will give you a ballot at the time of voting. If you have previously turned in a proxy card, please notify us at the Annual Meeting that you intend to cancel the proxy and vote by ballot.
- To vote using the proxy card: Simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, the designated proxies will vote your shares as you direct.
- **To vote over 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 control number from the enclosed proxy card. Your vote must be received by 11:59 P.M. Eastern Time on March 31, 2010 to be counted.
- **To vote on the Internet:** go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the control number from the enclosed proxy card. Your vote must be received by 11:59 P.M. Eastern Time on March 31, 2010 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 six (6) nominees for director set forth herein, provided that in the event cumulative voting occurs, the proxy holders will cumulate votes using their judgment so as to ensure the election of as many of the nominees set forth herein as possible; and
- "For" the ratification of the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2010 as described in Proposal Two;

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 or facsimile.

Quorum; Abstentions; Broker Non-Votes

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 (with respect to proposals other than the election of directors) "Against" votes, abstentions and broker non-votes. A "broker non-vote" occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that proposal and has not received instructions with respect to that proposal from the beneficial owner. Abstentions will be counted towards the vote total for each proposal, and will have the same effect as "Against" votes. Because directors are elected by a plurality vote, abstentions in the election of directors have no impact once a quorum exists. Abstentions and broker non-votes represented by submitted proxies will not be taken into account in determining the outcome of the election of directors. Abstentions and broker non-votes represented by submitted proxies will not be taken into account in determining the outcome of the proposal to ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2010.

If you hold shares in your name, and you sign and return a proxy card without giving specific voting instructions, your shares will be voted as recommended by our Board on all matters and as the proxy holders may determine in their discretion with respect to any other matters that properly come before the meeting.

Effect of Not Casting Your Vote

If you hold your shares in street name it is critical that you cast your vote if you want it to count in the election of directors (Proposal One of this proxy statement). In the past, if you held your shares in street name and you did not indicate how you wanted your shares voted in the election of directors, your bank or broker was allowed to vote those shares on your behalf in the election of directors as they felt appropriate.

Recent changes in regulations were made to take away the ability of your bank or broker to vote your uninstructed shares in the election of directors on a discretionary basis. Thus, if you hold your shares in street name and you do not instruct your bank or broker how to vote in the election of directors, no votes will be cast on your behalf. Your bank or broker will, however, continue to have discretion to vote any uninstructed shares on the ratification of the appointment of the Company's independent registered public accounting firm (Proposal Two of this proxy statement).

Deadline for Receipt of Stockholder Proposals

Proposals of stockholders that are intended to be presented by such stockholders at the annual meeting of stockholders for the 2010 fiscal year must be received by us no later than the close of business on the 45th day, nor earlier than the close of business on the 75th day, 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 March 2, 2011 or after May 31, 2011, in which case, the proposal must be received by us not earlier than the 120th day prior to the annual meeting and not later than the later of the 90th day prior to the annual meeting and the tenth day following public announcement of the date the annual meeting will be held 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. Under the federal securities laws, for such a matter to be included in the proxy materials for annual meeting of stockholders for the 2010 fiscal year, timely notice must be delivered to us at our principal executive offices to the attention of Bret M. DiMarco, our Corporate Secretary, not less than 120 days before the date of our proxy statement released to stockholders in connection with the previous year's annual meeting, or November 24, 2010. Stockholder proposals must otherwise comply with the requirements of Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). 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.

However, 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 Recommending 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.

Delivery of Voting Materials to Stockholders Sharing an Address

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 the proxy solicitation materials to certain stockholders who share an address, unless otherwise requested. A separate proxy card is included in the voting materials for each of these stockholders. We will promptly deliver, upon written or oral 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 write us at 5100 Patrick Henry Drive, Santa Clara, California 95054, Attn: Investor Relations, or contact us by telephone at (408) 764-4110 and request to be connected to our Investor Relations department. 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. 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.

Further Information

We will provide without charge to each stockholder solicited by these proxy solicitation materials a copy of Coherent's annual report on Form 10-K for the fiscal year ended October 3, 2009 without exhibits and any amendments thereto on Form 10-K/A 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 Securities and Exchange Commission ("SEC") filings, including our annual reports on Form 10-K, and all amendments thereto filed on Form 10 K/A, on the SEC website at www.sec.gov.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON APRIL 1, 2010

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

PROPOSAL ONE ELECTION OF DIRECTORS

Nominees

Six (6) members of our Board are to be elected at the Annual Meeting. 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 the 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 standing for re-election, and certain information about them as of December 31, 2009 are set forth below. All of the nominees have been recommended for nomination by a majority of the Board acting on the recommendation of the Governance and Nominating Committee of the Board, which was approved by a majority vote of the members of such committee. The committee consists solely of independent members of the Board. There are no family relationships among directors or executive officers of Coherent.

Name	Age	Director Since	Principal Occupation
John R. Ambroseo, PhD	48	2002	President and Chief Executive Officer
Susan M. James (1)(2)	63	2008	Retired Partner, Ernst & Young
L. William Krause (2)(3)	67	2009	President of LWK Ventures
Garry W. Rogerson, PhD (1)(2)(3)(4)	57	2004	Chairman of the Board of Coherent; Chairman and Chief Executive Officer of Varian, Inc.
Lawrence Tomlinson (1)(4)	69	2003	Retired Senior Vice President and Treasurer of Hewlett-Packard Co.
Sandeep Vij (2)(3)(4)(5)	44	2004	President and Chief Executive Officer of MIPS Technologies, Inc. (6)

- (1) Member of the Audit Committee.
- (2) Member of the Governance and Nominating Committee.
- (3) Member of the Compensation and H.R. Committee.
- (4) Member of the Special Committee.
- (5) Member of the Special Litigation Committee.
- (6) Mr. Vij became the President and Chief Executive Officer of MIPS Technologies, Inc. subsequent to December 31, 2009.

Except as set forth below, each of our directors has been engaged in his or her principal occupation set forth above during the past five years. There is no family relationship between any of our directors or executive officers. The Board has determined that, with the exception of Dr. Ambroseo, all of its current members are "independent directors" as that term is defined in the marketplace rules of the NASDAQ Stock Market.

John R. Ambroseo. Dr. Ambroseo has served as our President and Chief Executive Officer as well as a member of the Board since October 2002. Dr. Ambroseo served as our Chief Operating Officer from June 2001 through September 2002. Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Photonics Group from September 2000 to June 2001. From September 1997 to September 2000, Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Laser Group. From March 1997 to September 1997, Dr. Ambroseo served as our Scientific Business Unit Manager. From August 1988, when Dr. Ambroseo joined us, until March 1997, he served as a Sales Engineer, Product Marketing Manager, National Sales Manager and Director of European Operations. Dr. Ambroseo received a Bachelor degree from SUNY-College at Purchase and a PhD in Chemistry from the University of Pennsylvania.

Susan M. James. Ms. James originally joined Ernst & Young, a global leader in professional services, in 1975, becoming a partner in 1987 and from June 2006 to December 2009, was a consultant to Ernst & Young. During her tenure with Ernst & Young, she has been the lead partner or partner-in-charge for the audit work for a significant number of technology companies, including Intel Corporation, Sun Microsystems, Amazon.com, Autodesk and the Hewlett-Packard Corporation, and for the Ernst & Young North America Global Account Network. She also served on the Ernst & Young Americas Executive Board of Directors from January 2002 through June 2006. She is a certified public accountant and a member of the American Institute of Certified Public Accountants. Ms. James also serves on the board of directors of Applied Materials, Inc., a global leader in Nonmanufacturing SolutionsTM, Yahoo! Inc., an Internet technology company, and the Tri-Valley Animal Rescue, a non-profit that is dedicated to providing homes for homeless pets.

L. William Krause. Mr. Krause has been President of LWK Ventures, a private investment firm, since 1991. In addition, Mr. Krause served as Chairman of the Board of Caspian Networks, Inc., an IP networking systems provider, from April 2002 to September 2006 and as Chief Executive Officer from April 2002 until June 2004. From September 2001 to February 2002, Mr. Krause served as President and Chief Executive Officer of Exodus Communications, Inc., which he guided through Chapter 11 Bankruptcy to a sale of assets. He also served as President and Chief Executive Officer of 3Com Corporation, a global data networking company, from 1981 to 1990 and as its Chairman of the Board from 1987 to 1993 when he retired. Mr. Krause currently serves as a director of Brocade Communications Systems, Inc., a networking solutions and services company, Core-Mark Holdings, Inc., a distributor of packaged consumer goods and Sybase, Inc., a leader in enterprise and mobile software to manage, analyze and mobilize information.

Garry W. Rogerson. Dr. Rogerson has served as our Chairman of the Board since June 2007. Dr. Rogerson has been Chairman and Chief Executive Officer of Varian, Inc., a major supplier of scientific instruments and consumable laboratory supplies, vacuum products and services, since February 2009 and 2004, respectively. Dr. 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. Dr. Rogerson also serves on the board of directors of Varian.

Lawrence Tomlinson. Mr. Tomlinson retired from Hewlett-Packard Co., a global technology company, in June 2003. Prior to retiring from Hewlett-Packard Co., from 1993 to June 2003 Mr. Tomlinson served as its Treasurer, from 1996 to 2002 he was also a Vice President of Hewlett-Packard Co. and from 2002 to June 2003 was also a Senior Vice President of Hewlett-Packard Co. Mr. Tomlinson is a member of the board of directors of Salesforce.com, Inc., a customer relationship management service provider.

Sandeep Vij. Mr. Vij has held the position of President and Chief Executive Officer of MIPS Technologies, Inc., a leading provider of processor architectures and cores, since January 2010. Previously, Mr. Vij had been the Vice President and General Manager of the Broadband and Consumer Division of Cavium Networks, Inc., a leading 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. Mr. Vij is a member of the board of directors of MIPS Technologies, Inc.

Director Independence

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

Board Meetings and Committees

The Board held a total of thirteen (13) meetings during fiscal 2009. During fiscal 2009, the Board had three standing committees: the Audit Committee; the Compensation and H.R. Committee; and the Governance and Nominating Committee. In addition, in fiscal 2009, the Board had two additional committees: the Special Committee and the Special Litigation Committee. No director serving during such fiscal year attended fewer than 75% of the aggregate of all meetings of the Board and the committees of the Board upon which such director served.

Audit Committee

The Audit Committee, which has been established in accordance with Section 3(a)(58)(A) of the Exchange Act, consists of directors James, Rogerson, and Tomlinson. The Audit Committee held ten (10) meetings during fiscal 2009. All of the members of the Audit Committee are "independent" as defined under rules promulgated by the SEC and qualify as independent directors under the marketplace rules of the Nasdaq Stock Market for Audit Committee members. The Board has determined that directors James, Rogerson and Tomlinson are "audit committee financial experts" as that term is defined in Item 401(h) of Regulation S-K of the Securities Act of 1933, as amended. 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. A copy of the Audit Committee charter, including any updates thereto, is available on our website at www.coherent.com.

Compensation and H.R. Committee

During fiscal 2009, the Compensation and H.R. Committee of the Board consisted of directors Hart, Rogerson and Vij. Mr. Hart is not standing for reelection at the Annual Meeting. All of the members of the Compensation and H.R. Committee are "independent" as defined under the marketplace rules of the Nasdaq Stock Market. The Compensation and H.R. Committee held five (5) meetings during fiscal 2009. The Compensation and H.R. Committee, among other things, reviews and approves our executive compensation policies and programs, and grants stock options to our employees, including officers, pursuant to our stock option plans. See "Executive Officers and Executive Compensation—Compensation Discussion and Analysis" and "Director Compensation" below for a description of our processes and procedures for the consideration and determination of executive and director compensation. A copy of the Compensation and H.R. Committee charter, including any updates thereto, is available on our website at www.coherent.com.

Governance and Nominating Committee

During fiscal 2009, the Governance and Nominating Committee consisted of directors James, Hart, Press, Rogerson and Vij. Mr. Press resigned from the Board in November 2009. All of the members of the Governance and Nominating Committee are "independent" as defined under the marketplace rules of the Nasdaq Stock Market. The Governance and Nominating Committee held nine (9) meetings during fiscal 2009. 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. A copy of the Governance and Nominating Committee charter, including any updates thereto, is available on our website at www.coherent.com.

Corporate Governance Guidelines

The Company maintains a set of Corporate Governance Guidelines, which can also be found on our website under the "Corporate Governance" tab. The Corporate Governance Guidelines cover a range of governance-related matters, including that the Board of Directors maintain an independent Chairman of the Board, that the Board consist of a super-majority of independent members, minimum stock ownership for members of the Board of Directors and continuing education of members of the Board.

Attendance at Annual Meeting of Stockholders by Directors

All directors are encouraged, but not required to attend our annual meeting of stockholders. At our annual meeting held March 11, 2009, all members of the Board attended.

Process for Recommending Candidates for Election to the Board of Directors

The Governance and Nominating Committee will consider nominees 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 offices (Attention: Bret M. DiMarco, 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, 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 the Company if elected, 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 an annual meeting, 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 "Information Concerning Solicitation and Voting—Deadline for Receipt of Stockholder Proposals."

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 Governance and Nominating Committee deems proper;
- the Governance and Nominating Committee evaluates the performance of the Board as a whole and evaluates the performance and 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 Nasdaq 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. The Governance and Nominating Committee evaluates such factors, among others, and does not assign any particular weighting or priority to any of these factors. 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 Governance and Nominating 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

Stockholder Communication with the Board of Directors

We believe that management speaks for Coherent. Any stockholder may contact any of our directors by writing to them by mail c/o Bret M. DiMarco, Executive Vice President and General Counsel, at our principal executive offices, the address of which appears on the cover of this proxy statement.

Any stockholder may report to us any complaints regarding accounting, internal accounting controls, or auditing matters. Any stockholder who wishes to so contact us should send such complaints to the Audit Committee c/o Bret M. DiMarco, Executive Vice President and General Counsel, at our principal executive offices, the address of which appears on the cover of this proxy statement.

Any stockholder communications that the Board is to receive will first go to Mr. DiMarco, our General Counsel, 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. After logging the communication, Mr. DiMarco will forward the communication to the Chairman of the Board (in the case of communications directed to the whole Board) or to the applicable individual director(s) addressed in the correspondence.

In the case of any complaints, Mr. DiMarco will review, summarize and, if appropriate, investigate the complaint under the direction of the 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 General Counsel maintains with respect to all stockholder communications.

Director Compensation

During fiscal 2009, we paid our non-employee directors an annual retainer (depending upon position) and for service on the Board as follows:

Position	Annual Retainer
Board Member	\$40,000
Board Chair	\$16,000
Audit Committee Chair	\$34,000
Compensation and H.R. Comm. Chair	\$16,000
Governance & Nominating Comm. Chair	\$10,750
Audit Committee member (non-Chair)	\$12,500
Compensation and H.R. Committee member (non-Chair)	\$ 8,500
Governance and Nominating Committee member (non-Chair)	\$ 6,500

The chart below summarizes the gross cash amounts earned by non-employee directors for service during fiscal 2009 on the Board and its committees (all amounts in dollars):

	Annual Board and		Compensation	Nominating and		Special	
Name	Chairperson service (1)	Audit Committee (1)	and H.R. Committee (1)	Governance Committee (1)	Special Committee	Litigation Committee	Total
John H. Hart	40,000	6,250	12,250	3,250	_		61,750
Susan James	40,000	12,500		6,500			59,000
L. William Krause	20,000(2)	_	4,250				24,250
Garry W. Rogerson	56,000	6,250	8,500	7,000			77,750
Lawrence Tomlinson	40,000	34,000		_			74,000
Sandeep Vij	40,000	_	12,250	5,375		48,000	105,625
Former Director Clifford Press	40,000	_	_	4,875	_	_	44,875

⁽¹⁾ Includes the annual retainer.

The chart below summarizes the amounts earned by non-employee directors for service (including both Board and, where applicable, committee service) during fiscal 2009:

Nama	Fees Paid in	Stock Awards	Option Awards	Total (f)
Name	Cash (\$)	(\$)(1)(2)	(\$)(1)(2)	
John H. Hart	61,750	60,018	43,870	165,638
Susan James	59,000	24,644	64,257	147,901
L. William Krause	24,250	4,460	26,316	55,026
Clifford Press*	44,875	24,644	64,257	133,776
Garry W. Rogerson	77,750	35,316	31,843	144,909
Lawrence Tomlinson	74,000	36,860	31,843	142,703
Sandeep Vij	105,625	35,316	31,843	172,784

^{*} Former Director

⁽²⁾ Includes pro rated amount for service as a director after joining in June 2009.

⁽¹⁾ These amounts do not reflect compensation actually received. Rather, these amounts represent the aggregate expense recognized by the Company for financial statement reporting purposes in fiscal 2009, in accordance with ASC 718, for restricted stock units and stock options which were granted in fiscal 2009 and prior to fiscal 2009 under the Company's Director Stock Plan. The assumptions used to calculate the value of these stock units and stock options are set forth in Note 12, "Employee Stock Option and Benefit Plans" of the Notes to the Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended October 3, 2009.

(2) The directors' aggregate holdings of restricted stock units as of the end of fiscal 2009 were as follows (the vesting for which is 100% on March 19, 2011 for 2,000 shares (for all except Mr. Krause) and 100% on April 1, 2012 for 2,000 shares to the extent such individual is a member of the Board at such time):

John H. Hart	4,000 shares
Susan James	4,000 shares
L. William Krause	2,000 shares
Garry W. Rogerson	4,000 shares
Lawrence Tomlinson	4,000 shares
Sandeep Vij	4,000 shares
Former Director	
Clifford Press	4,000 shares

(3) The directors' aggregate holdings of stock option awards (both vested and unvested) as of the end of fiscal 2009 were as follows:

John H. Hart	58,500 shares
Susan James	30,000 shares
L. William Krause	24,000 shares
Garry W. Rogerson	59,000 shares
Lawrence Tomlinson	50,800 shares
Sandeep Vij	60,000 shares
Former Director	
Clifford Press	30,000 shares

The following table shows equity grants received by non-employee directors in fiscal 2009:

Name	Restricted Stock Units Granted in Fiscal 2009 (#)	Stock Options Granted in Fiscal 2009(# shares)
John H. Hart	2,000	6,000
Susan James	2,000	6,000
L. William Krause	2,000	24,000
Garry W. Rogerson	2,000	6,000
Lawrence Tomlinson	2,000	6,000
Sandeep Vij	2,000	6,000
Former Director		
Clifford Press	2,000	6,000

Our 1998 Directors' Stock Plan was adopted by the Board on November 24, 1998 and was approved by the stockholders on March 17, 1999. The 1998 Directors' Stock Plan was amended on March 23, 2003, and was further amended on March 30, 2006, when the 1998 Directors' Stock Plan was renamed the 1998 Director Stock Plan (the "1998 Director Plan"). As of September 30, 2007, 150,000 shares were reserved for issuance thereunder. Under the terms of the 1998 Director Plan, the number of shares reserved for issuance thereunder is increased each year by the number of shares necessary to restore the total number of shares reserved to 150,000 shares.

As of October 3, 2009, the 1998 Director Plan provided for the automatic and non-discretionary grant of a non-statutory stock option to purchase 24,000 shares of the Company's common stock to each non-employee director on the date on which such person becomes a director. Thereafter, each non-employee director will be automatically granted a non-statutory stock option to purchase 6,000 shares of common stock on the date of and immediately following each Annual Meeting of Stockholders at which such non-employee director is reelected to serve on the Board, if, on such date, he or she has served on the Board for at least three months. Such plan provides that the exercise price must be equal to the fair market value of the common stock on the date of grant of the options.

Additionally, as of October 3, 2009, the 1998 Director Plan provides for the automatic and non-discretionary grant of 2,000 restricted stock units ("RSUs") to each non-employee director on the date on which such person becomes a director. Thereafter, each non-employee director will be automatically granted 2,000 RSUs on the date of and immediately following each Annual Meeting of Stockholders at which such non-employee director is reelected to serve on the Board, if, on such date, he or she has served on the Board for at least three months.

The 1998 Director Plan provides that with respect to any options held by a director who retires after at least eight years of service on the Board, such director will fully vest in and have the right to exercise his or her option as to both vested and unvested shares as of such date. The option will remain exercisable for the lesser of (i) two (2) years following the date of such director's retirement or (ii) the expiration of the option's original term.

As of October 3, 2009, 196,700 shares have been issued upon the exercise of options and the vesting of restricted stock units under the 1998 Director Plan. There were no options exercised by non-employee directors during fiscal 2009.

Vote Required

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 [six] [(6)] 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.

If a quorum is present, the six (6) nominees receiving the highest number of votes will be elected to the Board. See "Information Concerning Solicitation and Voting—Quorum; Abstentions; Broker Non-Votes."

THE BOARD RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE SIX NOMINEES PRESENTED HEREIN.

PROPOSAL TWO

RATIFICATION OF APPOINTMENT OF 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, 2010, and 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 the 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, 2009, 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 Deloitte & Touche LLP, the member firms of Deloitte Touche Tohmatsu, and their respective affiliates (collectively, "Deloitte") provided during fiscal years 2009 and 2008:

	2009	2008
Audit fees (1)	\$1,693,202	\$4,753,342
Audit-related fees	_	
Tax fees	_	
All other fees (2)	72,375	34,300
Total	\$1,765,577	\$4,787,642

⁽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. The 2008 amount includes approximately \$1,885,000 incurred during fiscal 2008 for additional services related primarily to the restatement of our consolidated financial statements for the fiscal years 1995 through 2005.

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 from the Committee to pre-approve certain additional services, and such pre-approvals are communicated to the full Committee at its next meeting. During fiscal 2009, 100% of the services were pre-approved by the Audit Committee in accordance with this policy.

⁽²⁾ Represents the annual subscription for access to the Deloitte Accounting Research Tool, which is a searchable on-line accounting database (\$2,000) in both fiscal years, due diligence associated with our acquisition activities in fiscal 2009 and project assistance in fiscal 2009.

Vote Required

The affirmative vote of a majority of the votes cast will be required to ratify the selection of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending October 2, 2010.

THE AUDIT COMMITTEE UNANIMOUSLY 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, 2010.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth, as of December 31, 2009, certain information with respect to the beneficial ownership of 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 executive officers and directors as a group, based on information available to the Company as of filing this proxy statement. 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)
Dimensional Fund Advisors (2)	2,112,114	8.57%
Eagle Asset Management, Inc. (2)	1,591,365	6.46%
Wells Fargo Capital Management (2)	1,325,076	5.38%
John R. Ambroseo, PhD (3)	686,880	2.72%
Helene Simonet (4)	263,273	1.07%
Luis Spinelli (5)	86,835	*
Bret M. DiMarco (6).	75,115	*
Ronald Victor	_	*
John H. Hart (7)	54,000	*
Susan James (8).	8,000	*
L. William Krause (9).	_	*
Garry W. Rogerson, PhD (10).	53,000	*
Lawrence Tomlinson (11)	24,200	*
Sandeep Vij (12)	56,600	*
All directors and executive officers as a group (10 persons) (13)	1,307,903	5.07%

^{*} Represents less than 1%.

⁽¹⁾ Based upon 24,644,071 shares of Coherent common stock outstanding as of December 31, 2009. 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 Coherent common stock subject to options held by that person that are currently exercisable or will be exercisable within 60 days of December 31, 2009 and all shares of restricted stock which are vested on December 31, 2009, are deemed outstanding. For Dr. Ambroseo, Ms. Simonet and Messrs. Spinelli and DiMarco, no shares of performance-based restricted stock or restricted stock units are included. In addition, such shares, are not deemed outstanding for the purpose of computing the percentage ownership of any other person.

⁽²⁾ Based on the most recent Schedule 13F, 13D or Schedule 13G (or amendments thereto) filed by such person with the SEC prior to the date of filing this report and a review of a stockholder listing report provided by a third party provider.

⁽³⁾ Includes 605,200 shares issuable upon exercise of options and 7,500 shares issuable upon vesting of RSUs held by Dr. Ambroseo which were exercisable or would become exercisable or vested, as the case may be, within 60 days of December 31, 2009.

- (4) Includes 238,983 shares issuable upon exercise of options and 4,167 shares issuable upon vesting of RSUs held by Ms. Simonet which were exercisable or would become exercisable or vested, as the case may be, within 60 days of December 31, 2009.
- (5) Includes 77,900 shares issuable upon exercise of options and 1,667 shares issuable upon vesting of RSUs held by Mr. Spinelli which were exercisable or would become exercisable or vested, as the case may be, within 60 days of December 31, 2009.
- (6) Includes 67,083 shares issuable upon exercise of options and 3,333 shares issuable upon vesting of RSUs held by Mr. DiMarco which were exercisable or would become exercisable or vested, as the case may be, within 60 days of December 31, 2009.
- (7) Includes 49,500 shares issuable upon exercise of options held by Mr. Hart which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (8) Includes 8,000 shares issuable upon exercise of options held by Ms. James which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (9) Mr. Krause was elected to the Board in June 2009, and accordingly, has no options which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (10) Includes 50,000 shares issuable upon exercise of options held by Dr. Rogerson which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (11) Includes 21,000 shares issuable upon exercise of options held by Mr. Tomlinson which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (12) Includes 51,000 shares issuable upon exercise of options held by Mr. Vij which were exercisable or would become exercisable within 60 days of December 31, 2009.
- (13) Includes an aggregate of 1,168,666 options and 16,667 shares issuable upon vesting of RSUs which were exercisable or would become exercisable or vested, as the case may be, within 60 days of December 31, 2009. This does not include any shares held by our former director, Mr. Press or Oliver Press Partners LLC and its affiliates.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 (the "Exchange Act") requires our officers and directors, and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Such officers, directors and ten-percent stockholders are also required by SEC rules to furnish us with copies of all forms that they file pursuant to Section 16(a). Based solely on our review of the copies of such forms received by us, and on written representations from certain reporting persons that no other reports were required for such persons, we believe that, during fiscal 2009, our officers, directors and greater than ten percent stockholders complied with all applicable Section 16(a) filing requirements, except that due to an administrative error the Forms 4 for the automatic director grants to our independent directors at our last annual meeting (Messrs. Hart, Press, Tomlinson and Vij, Ms. James and Dr. Rogerson) were filed late.

EXECUTIVE OFFICERS AND EXECUTIVE COMPENSATION

Executive Officers

The name, age, position and a brief account of the business experience of our chief executive officer and each of our other executive officers as of December 31, 2009 are set forth below:

Name	Age	Office Held
John R. Ambroseo, PhD	48	President and Chief Executive Officer
Helene Simonet.	57	Executive Vice President and Chief Financial Officer
Luis Spinelli	62	Executive Vice President and Chief Technology Officer
Bret M. DiMarco	41	Executive Vice President, General Counsel and Corporate Secretary

Please see "Proposal One--Election of Directors--Nominees" above for Dr. Ambroseo's biographical information.

Helene Simonet. Ms. Simonet has served as our Executive Vice President and Chief Financial Officer since April 2002. Ms. Simonet served as Vice President of Finance of our former Medical Group and Vice President of Finance, Photonics Division from December 1999 to April 2002. Prior to joining Coherent, she spent over twenty years in senior finance positions at Raychem Corporation's Division and Corporate organizations, including Vice President of Finance of the Raynet Corporation. Ms. Simonet has both Master's and Bachelor degrees from the University of Leuven, Belgium.

Luis Spinelli. Mr. Spinelli has served as our Executive Vice President and Chief Technology Officer since February 2004. Mr. Spinelli joined the Company in May 1985 and has since held various engineering and managerial positions, including Vice President, Advanced Research from April 2000 to September 2002 and Vice President, Corporate Research from September 2002 to February 2004. Mr. Spinelli has led the Advanced Research Unit from its inception in 1998, whose charter is to identify and evaluate new and emerging technologies of interest for us across a range of disciplines in the laser field. Mr. Spinelli holds a degree in Electrical Engineering from the University of Buenos Aires, Argentina with post-graduate work at the Massachusetts Institute of Technology.

Bret M. DiMarco. Mr. DiMarco has served as our Executive Vice President and General Counsel since June 2006 and 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 degree from the University of California at Irvine and a Juris Doctorate degree from the Law Center at the University of Southern California. He is also an adjunct professor of law at the University of California Hastings College of the Law, teaching corporate law and mergers & acquisitions.

Compensation Discussion and Analysis

Our Executive Compensation Philosophy

Our executive compensation programs are designed to provide strong alignment between executive pay and performance and to focus executives on making policies and decisions that enhance our stockholder value in both the short and long term. As we explain further below, the Compensation and H.R. Committee is highly focused on having a significant portion of our executive officers' compensation tied to achieving certain performance goals. Accordingly, our objectives for executive compensation programs are to:

- Ensure that the executive team has clear goals and accountability with respect to our financial performance;
- Attract, motivate and retain talented executives who are responsible for the success of our company by maintaining a total compensation program that is competitive with the prevailing practices in our industry;

- Provide market levels of pay for meeting target performance expectations, with above market pay for performance above target and below market pay for performance below target;
- Be mindful in our design of an executive compensation structure of both our historical practices, as well as the evolving practices in our industry as well as the broader high technology industry;
- Promote our culture of integrity by properly rewarding appropriate risk taking, while not promoting excessive risk taking; and
- Prudently utilize discretion to make awards that differ from the defined pay structure, as warranted, to recognize exceptional circumstances and performance.

Throughout this discussion, our chief executive officer and chief financial officer during fiscal 2009, as well as the other individuals who are included in the Fiscal 2009 Summary Compensation Table, are referred to as our "Named Executive Officers."

Compensation and H.R. Committee Operations and Decision Making

The committee held five (5) meetings in fiscal 2009. Historically, the committee has considered Named Executive Officer base salary and other compensation during March or April of each fiscal year. For fiscal 2009, the committee approved the measurement matrix for fiscal 2009 cash bonuses in November 2008, salaries in December 2008 and made equity grants in November 2008. For fiscal 2010 executive compensation, the committee acted in November 2009 in order to move the compensation consideration process to tie more closely with the beginning of the fiscal year.

Role and Authority of Our Compensation and H.R. Committee

Following our annual meeting in March, 2009, the membership of the Compensation and H.R. Committee consisted of Messrs. Vij (Chair) and Hart and Dr. Rogerson. Following his appointment to the Board, Mr. Krause became a member of the committee in June 2009. Each of these individuals qualifies as (i) an "independent director" under the requirements of The NASDAQ Stock Market, (ii) a "non-employee director" under Rule 16b-3 of the Securities Exchange Act of 1934 (the "1934 Act"), (iii) an "outside director" under Section 162(m) of the Code and (iv) an "independent outside director" as that term is defined by RiskMetrics Group, formerly Institutional Shareholder Services.

The Compensation and H.R. Committee is responsible for ensuring that our executive compensation programs are effectively designed, implemented and administered. In particular, the committee reviews the corporate goals and objectives and approves the compensation for our Named Executive Officers. The compensation includes base salary and incentive non-equity and equity compensation as well as executive benefits and perquisites. The committee has sole authority delegated to it by the Board to make equity grants to our Named Executive Officers.

Our Compensation and H.R. Committee has adopted a charter, a copy of which may be found on our website at "www.coherent.com"—"Company"—"Corporate Governance." The committee reviews its charter annually and, where appropriate, revises it accordingly for Board approval.

The committee may meet with or without management present, at its discretion. At most of its meetings, the committee conducts an executive session without management present. The objective of these sessions is to enable the committee to discuss compensation issues without those who will be affected by the decisions in attendance.

Role of Executive Officers in Compensation Decisions

The Compensation and H.R. Committee regularly meets with Dr. Ambroseo, our chief executive officer, to obtain recommendations with respect to the compensation programs, practices and packages for our Named Executive Officers other than Dr. Ambroseo. Additionally, Ms. Simonet, our executive vice president and chief financial officer, and Mr. DiMarco, our executive vice president and general counsel are regularly invited to meetings of the committee or otherwise asked to assist the committee. Additionally, during fiscal 2009, members of our human resources group

regularly attended the committee's meetings. 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, the development of compensation proposals for consideration, and providing insights regarding our employees (executive and otherwise) and the business context for the committee's decisions. Named Executive Officers will attend portions of committee meetings when requested, but will leave the meetings as appropriate when matters which will potentially affect them personally are discussed. From time to time, outside legal counsel attends committee meetings. The Compensation and H.R. Committee makes decisions regarding Dr. Ambroseo's compensation without him present.

Role of Compensation Consultants

In fiscal 2009, the Compensation and H.R. Committee engaged Farient Advisors ("Farient") as its independent compensation consultants. Farient was retained to comprehensively review and analyze our executive compensation program and to make recommendations for fiscal 2009 compensation. Farient serves at the discretion of the committee and is not permitted to do other work for the Company unless it was expressly authorized by the committee. Since its retention, Farient has not done any work for the Company other than its work with the committee. The committee believes that it is critical for its compensation consultant to meet with members of management, especially our chief executive officer, to obtain their perspectives on the context for decision-making and impact of compensation recommendations. The committee is focused on maintaining the independence of Farient and, accordingly, does not anticipate having Farient perform any other work for the Company in addition to its direct work for the committee.

Additionally, we participate in and maintain a subscription to the Radford Executive Compensation Survey. This survey provides benchmark data and overall practices reports to assist us with regards to employees generally. Such data includes executive compensation data and is presented from time to time to the committee at its request.

The Board also determined that a separate consultant was needed for Board-related compensation to avoid any perceived conflict of interest for the committee's advisor with respect to management compensation, Farient. Mr. DiMarco, our general counsel and corporate secretary, on behalf, and at the direction, of the Board, retained Compensia, Inc. ("Compensia") to provide a comprehensive review on compensation for membership on the Board and its committees. During fiscal 2009, the Board effected the prior recommendations from Compensia in setting compensation for service on the Board and its committees

The table below sets forth director cash compensation for fiscal 2009:

Position	Annual Retainer(1)
Board Member	\$40,000
Board Chair	\$16,000
Audit Committee Chair	\$34,000
Compensation and H.R. Comm. Chair	\$16,000
Governance & Nominating Comm. Chair	\$10,750
Audit Committee member (non-Chair)	\$12,500
Compensation and H.R. Committee member (non-Chair)	\$ 8,500
Governance and Nominating Committee member (non-Chair)	\$ 6,500

⁽¹⁾ The annual retainer is paid quarterly in equal installments.

Pay Positioning Strategy and Benchmarking of Compensation

We have striven to position the midpoint of our target compensation ranges near the 50th percentile of our peers, resulting in targeted total compensation that is competitive within our labor market for performance that meets the objectives established by the committee. An individual's actual salary, non-equity incentive compensation opportunity and equity compensation may fall below or above the target position based on the individual's experience, seniority, skills, knowledge, performance and contributions. These factors are weighed individually by the committee in its judgment, and no one factor takes precedence over others nor is any formula used in making these decisions. The chief

executive officer's review of the performance of the other Named Executive Officers is carefully considered by the committee in making individual pay decisions. Actual realized pay will be 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 this target market positioning, the committee reviewed 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 and from multiple compensation survey sources, including a broad cross-section of technology companies of similar size to Coherent from the Radford Executive Compensation Survey and survey data provided by Salary.com. For pay decisions made in fiscal 2009, Farient recommended that the committee approve modifications to the group of peer companies for conducting compensation analyses from proxies to better reflect our size, strategy and business. For fiscal 2009, the peer companies were Altera Corporation, Axcelis Technologies, Inc., Cymer Inc., Integrated Device Technology, FEI Company, FLIR Sytems, Inc., GSI Group, Inc., JDS Uniphase, Linear Technology, Newport Corporation, Plantronics Inc., PMC-Sierra, Inc. and Trimble Navigation Limited. Following recommendations from Farient, the committee removed Adaptec, Inc., Cirrus Logic, Inc., Cypress Semiconductor Corp., Lam Research Corp. and Novellus Systems, Inc. and added FLIR Systems, Inc. and GSI Group, Inc. to the peer group for fiscal 2009. The committee also was mindful and took into consideration the recent policy update by RiskMetrics with regards to the formulation and use of peer groups and the relative size of peers, although the peer group selected is not confined to the Global Industrial Classification System (GICS) code for Coherent.

The committee annually reviews and updates, if necessary, the peer group used for proxy analyses to ensure that the comparisons are meaningful. Several factors are considered in selecting the peer group, the most important of which are:

- Industry (primarily companies in the Electronic Equipment and Semiconductor sub-industry classifications defined by the Global Industry Classification Standard (GICS) system);
- Revenue level (as a proxy for complexity) (primarily companies with between \$200 million and \$2 billion in revenues); and
- Geographic location (U.S. technology markets).

The committee's perspective is that companies that meet these criteria are the most likely competitors for executive talent in our labor markets.

Components of Compensation

The principal components of our executive officer compensation and employment arrangements during fiscal 2009 included:

- Base salary;
- Variable non-equity incentive payments;
- Long-term equity awards through time-based stock options;
- Long-term equity awards through time-based restricted stock units;
- Long-term equity incentive awards through performance-based restricted stock units (active from earlier grants, but no new grants during fiscal 2009);
- Change of control protection through participation in our Change of Control Plan;

- Retirement savings matching benefits provided under a 401(k) plan and under our deferred compensation plan;
- Executive perquisites; and
- Benefit programs generally available to other employees.

These components were selected because the committee believes that a combination of salary, incentive pay, benefits and perquisites is necessary to help us attract and retain the executive talent on which Coherent's success depends and in recognition of some of the benefits which have historically been available to executives. The variable and equity components are structured to allow the committee to reward performance throughout the fiscal year and to provide an incentive for executives to appropriately balance their focus on short-term and long-term strategic goals. The fixed components, including salary, benefits and perquisites, are structured to provide a minimum level of security for our executives relative to their day-to-day spending needs and long-term needs for income and are intended to be competitive with the levels of base income that each executive could receive from similar employment at other companies. The committee believes that, when taken together, these components are effective in achieving the objectives of our compensation program and philosophy and are reasonable relative to our strategy of managing total compensation near the 50th percentile of market practices.

The committee annually reviews the entire compensation program with the assistance of Farient, its independent compensation consultant. The committee reviews change in control protections every two years upon renewal of the plan. However, the Compensation and H.R. Committee may at any time review one or more components as necessary or appropriate to ensure such components remain competitive and appropriately designed to reward performance. In setting compensation levels for a particular Named Executive Officer, the committee considers both individual (as described above) and corporate factors.

During fiscal 2009, the committee made two types of equity grants: (a) stock options and (b) time-based restricted stock units. As a result of the Company's historical equity grant review, the committee did not make any equity grants to the Named Executive Officers during fiscal 2007. During fiscal 2009, the committee made three types of grants to the Named Executive Officers: (a) an option grant to address missed cycle grants in fiscal 2007, (b) a grant of time-based restricted stock units and (c) as part of the committee's focus on tying a significant portion of the Named Executive Officers' compensation to performance criteria, performance-based restricted stock units which will vest (assuming achievement of the performance metrics) in November, 2010 (as discussed more fully below). As these performance-based restricted stock units will be measured for calculation of vesting in November, 2010, the committee believed that it was in the best interests of the Company and its stockholders to utilize stock options and time-based grants in fiscal 2009, due to the uncertain economic climate and the resulting challenge in setting metrics for performance-based restricted stock units.

Base Salary and Variable Non-Equity Incentive Compensation

Base Salary

We provide base salary to our Named Executive Officers and other employees to compensate them for services rendered on a day-to-day basis during the fiscal year. The committee reviewed information provided by its independent compensation consultant with respect to similarly situated individuals at the peer companies to assist it in determining base salary for each Named Executive Officer. In addition, the committee considers each individual's experience, skills, knowledge and responsibility. In reviewing each Named Executive Officer other than the chief executive officer, the committee also considers such individual's performance review provided by the chief executive officer. With respect to the chief executive officer, the committee additionally considers the performance of Coherent as a whole.

During the first quarter of fiscal 2009, upon management's recommendation, the committee determined not to increase the salaries of the executive officers for fiscal 2009 due to the uncertain economic climate. Prior to making this determination the committee discussed management's recommendation with Farient, which agreed with the recommendation.

Variable Non-Equity Incentive Compensation

To focus each executive officer on the importance of the performance of Coherent, a substantial portion of each individual's potential short-term compensation is in the form of variable incentive pay that is tied to achieving goals established by the Compensation and H.R. Committee. In fiscal 2009, Coherent maintained one incentive cash program under which executive officers were eligible to receive bonuses, the 2009 Variable Compensation Plan ("2009 VCP").

2009 VCP

The 2009 VCP was designed to promote the growth and profitability of Coherent during the difficult economic situation facing the industry. It provided incentive compensation opportunity in line with targeted market rates to our Named Executive Officers who are critical to the successful development and attainment of the Company's business objectives. Under the 2009 VCP, participants were eligible to receive quarterly bonuses if specific performance goals set by the committee at the beginning of the year were achieved. The committee established these goals when it adopted the 2009 VCP during the first quarter of fiscal 2009. In setting the performance goals, the Compensation and H.R. Committee assessed the anticipated difficulty and relevant importance to the success of Coherent of achieving the performance goals.

The actual awards (if any) payable for each quarter varied depending on the extent to which actual performance met, exceeded or fell short of the goals approved by the committee. The 2009 VCP established goals tied to the Company achieving varying levels of adjusted EBITDA as a percentage of sales, with a payout modifier tied to the level of the adjusted EBITDA for the measurement period. For purposes of the 2009 VCP, adjusted EBITDA was defined as earnings before interest, taxes, depreciation, amortization and certain other non-operating income and expense items and other items, such as the fiscal impact of stock option expensing under Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC 718 (formerly Statement of Financial Accounting Standards No. 123(R), Share-Based Payments, or SFAS 123(R)), stock investigation costs and litigation related thereto, impairment or restructuring charges, and the impact of significant acquisitions. In order to achieve any payout, the Company's adjusted EBITDA for any quarter in fiscal 2009 had to exceed 13%:

Adj. EBITDA Achievement	Payout Modifier
Less than 13%	0%
14%	25%
15%	50%
16%	100%
17%	200%

Therefore, if Coherent failed to achieve at least 13% adjusted EBITDA for a particular quarter, the participant would not receive any bonus for that particular quarter. As noted above, the committee set these performance goals to focus the management team on increasing the performance of the Company through meeting and improving the Company's adjusted EBITDA. The committee and Farient chose to focus on operating results so that the executive management was incentivized to deliver the type of sustainable operations that benefits our stockholders. Based on publicly available information and news reports, management and the committee noted that a number of other public companies adjusted or otherwise modified their bonus programs to allow for payouts for lower than projected performances due in part to the general economic turndown. However, management recommended and the committee agreed that the 2009 VCP should not be adjusted mid-year or otherwise to address the economic downturn, which acted to further align executive compensation and company performance. Accordingly, as seen below, there was only a minor payout in the first fiscal quarter under the 2009 VCP and none in the second, third and fourth fiscal quarters. Given the general economic conditions facing the Company and the rest of the industry and the fact that ultimately little to no payout was earned under the 2009 VCP, the committee believes that the goals were reasonably difficult to achieve.

The table below describes for each Named Executive Officer under the 2009 Variable Compensation Plan (i) the target percentage of base salary, (ii) the potential award range as a percentage of base salary, and (iii) the actual award earned for fiscal 2009

		Payout			
Named Executive Officer	Target Percentage of Salary	Percentage Range of Salary	Actual Award (1)	Actual Award Percentage of Salary (2)(3)	
John Ambroseo	100%	0-200%	\$ 2,262	*0/0	
Helene Simonet	70%	0-200%	\$ 1,010	*0/0	
Bret DiMarco	50%	0-200%	\$ 585	*0/0	
Luis Spinelli	50%	0-200%	\$ 499	*%	

^{*} Less than 1%

Long-Term, Equity-Based Incentive Awards

Equity-based awards are made to our employees, including the Named Executive Officers, under our 2001 Stock Plan. The goal of our equity-based award program is to provide employees and executives the perspective of an owner with a stake in the success of Coherent, thus further increasing alignment with our stockholders. Our long-term incentive program may include the grant of stock options, time-based restricted stock/units and/or performance-based restricted stock/units.

When making its compensation decisions, the committee reviews the comprehensive compensation overview prepared by Farient which reflects potential realizable value under current short and long term compensation arrangements for the Named Executive Officer.

Fiscal 2009 Awards

During several meetings over the third and fourth quarters of fiscal 2009 and first quarter of fiscal 2009, the committee met with Farient to discuss the design of an appropriate long-term, equity based incentive award program for fiscal 2009 compensation. The committee determined to base the program largely on a combination of non-qualified stock options and time-based restricted stock units. In particular, the committee determined that the stock option portion of equity compensation would directly align executive compensation with stockholder interest and the time-based restricted stock units would provide both a retention tool and further tie management's compensation to our performance. The committee believed that to ensure that the grants provided retention and a short and long term effect, the grants would vest over three years through one-year annual cliff vesting.

The following table reflects the grants for the Named Executive Officers for the time-based restricted stock units and non-qualified stock options grants during fiscal 2009:

	Time-Based RSU			
Named Executive Officer	Grants	Non-Qualified Stock Option Grants		
John Ambroseo	28,550	75,600		
Helene Simonet	10,200	26,950		
Bret DiMarco	8,050	21,250		
Luis Spinelli	6,700	17,700		

⁽¹⁾ Reflects amounts earned during fiscal 2009.

⁽²⁾ This reflects the aggregate quarterly bonuses earned by the Named Executive Officers for fiscal 2009 under the 2009 Variable Compensation Plan.

⁽³⁾ As seen in the plan-based award table below, no payments were made for the second, third and fourth fiscal quarter under the 2009 Variable Compensation Plan as the Company did not achieve the minimum performance requirements.

Equity Award Practices

Our broad-based employee stock option program is designed to promote long-term retention and recognize individual performance. Participation is driven by the annual review process. Guidelines are based on competitive market practice for grants for new hires, promotions, and ongoing performance-related grants. Typically, an employee may be offered an option or restricted stock unit grant upon beginning employment and may be eligible for periodic grants thereafter. The size of grants (and eligibility for the same) is influenced by the then-current guidelines for non-executive officer grants (if any) and the individual's performance or particular requirements at the time of hire. Employees, including the Named Executive Officers, are also eligible to participate in our Employee Stock Purchase Plan.

Stock Grant Process

The committee's process for granting equity awards is as follows:

- The Compensation and H.R. Committee has the authority to make equity grants to both executive officers and other service providers;
- The Compensation and H.R. Committee will make grants in open trading window periods with grants effective on the date of such meeting, or, if due to exigent circumstances they meet in a closed window period, the grant will be effective 45 days thereafter; and
- The Compensation and H.R. Committee may not grant equity awards by written consent.

During fiscal 2009 equity grants were only made by the Compensation and H.R. Committee.

Stock Grant Policies

The Board and/or the Compensation and H.R. Committee annually considers a "burn rate" which the annual grants of equity awards under the 2001 Stock Plan will not exceed. "Burn rate" is the potential dilution of common shares outstanding if all new equity grants are vested and/or exercised, expressed as a percentage of common shares outstanding.

In fiscal 2009, the Compensation and H.R. Committee granted an aggregate of 602,950 shares subject to options, and time-based restricted stock units representing 2.47% of Coherent's outstanding common stock as of October 3, 2009 (excluding automatic grants to directors under the Director Option Plan). With the assistance of Farient, the committee has reviewed this burn rate relative to peer practices and guidance from RiskMetrics and found that the total dilution was consistent with the median of peer practices and complied with the RiskMetrics guidelines.

In general, we issue only nonqualified stock options to employees and executives, although we have issued incentive stock options in the past. In the last few years, we have typically granted options subject to either two or three year vesting (one grant cycle had an 18 month vest due to the committee being "off cycle" as a result of the company's historical stock investigation), with an equal tranche vesting on each of the applicable calendar anniversaries following the grant date. These grants typically have a life of six years.

Deferred Compensation

Executive officers are eligible to participate in our 401(k) Retirement Plan on the same terms as all other U.S. employees. Our 401(k) Retirement Plan is 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 Named Executive Officers).

We maintain a Deferred Compensation Plan for executive management personnel and members of the Board. The purpose of the Deferred Compensation Plan is to permit eligible participants the option 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 bonus pay and commissions and up to 100% of directors'

annual retainer earned in the upcoming plan year. Plan participants may invest 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 participant's deferrals and earnings are reflected on our financial statements and remain, respectively, a general asset and unfunded liability of the Company. Participants have the status of unsecured creditors of Coherent with respect to the payment of plan benefits. Separate distribution elections are made by the plan participant for each plan year and include lump sum payment, annual installments and future year scheduled in-service withdrawals.

At our discretion, we may provide for Company contributions in excess of the Internal Revenue Code limit to qualified 401(k) plans to be made to the non-qualified deferred compensation plan. The calculation for this non-qualified plan contribution is 4% of eligible compensation (as defined by the 401(k) qualified plan) less the 401(k) qualified plan match limit. In fiscal 2009, a contribution was made to the non-qualified deferred compensation plan for certain Named Executive Officers for plan year 2008 at a 6% contribution rate (which was the applicable contribution rate during fiscal 2009). In fiscal 2010, the Company will make a similar contribution for the 2009 plan year at a 4% contribution rate. These amounts are reflected in both the Summary Compensation Table under "Other Compensation" and in the "Non-Qualified Deferred Compensation Table" below.

The committee considers the Deferred Compensation Plan to be a reasonable and appropriate program because it allows the Named Executive Officers and members of the Board to accumulate retirement benefits at a rate, relative to their overall income, that is comparable to the rate that other employees are able to accumulate retirement benefits, and 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.

Change in Control and Severance Plan

We have adopted the Change in Control and Severance Plan (the "change in control plan") which provides certain benefits in the event of a change in control of Coherent for certain employees, including each of our Named Executive Officers. Benefits are provided under this plan if there is a tender offer or merger resulting in Coherent being acquired by another company or entity and within two years thereafter the executive's employment is subsequently terminated without cause or is voluntarily terminated following a constructive termination. The committee and our Board believe that the prospect of such a change in control would likely result in our executive officers facing personal uncertainties and distractions as to how a change in control might affect them. The committee believes that including our Named Executive Officers in the plan allows them to focus solely on the best interests of our stockholders in the event of a possible, threatened or pending change in control, and encourages them to remain with Coherent despite the possibility that a change in control might affect them adversely. This change in control plan therefore serves as an important retention tool to ensure that personal uncertainties do not dilute our executive's complete focus on promoting stockholder value. The change in control plan was amended in fiscal 2009 for Section 409A-related matters and other administrative matters.

With respect to our chief executive officer, Dr. Ambroseo, the change in control plan provides that in the event that plan benefits plus any other benefits considered parachute payments under the Internal Revenue Code, equal or exceed 3.54 times his "base amount" (as determined under Internal Revenue Code Section 280G), he will receive an additional payment sufficient to fully offset the impact of any excise tax under 280G. The committee believes that the level of benefits provided under the plan is reasonable and not excessive. See "Change in Control Arrangements" for more details on this plan.

Executive perquisites and Other Personal Benefits

The committee also provides our executive officers with the following perquisites and other personal benefits: automobile benefit and capped executive medical reimbursement. The committee has determined, with advice from Farient, that the use of a company-leased vehicle and a medical reimbursement benefit are reasonable in the context of the overall compensation levels of our Named Executive Officers, are consistent with a number of other peer companies, have been historical components of compensation for executive officers at the Company and serve as further retention tools.

We have historically maintained a vehicle program whereby executive officers were eligible to receive either (a) a monthly automobile allowance or (b) have the auto allowance apply as amortization against the purchase price of a vehicle purchased and owned by the Company over such period of time for the amortized value of the automobile to reach 20% of the original value of the car, not to exceed four years ("amortized method"). During the fourth quarter of fiscal 2009, the committee revised the administration of the program so that executive officers are instead eligible to receive either (a) a monthly automobile allowance or (b) a leased vehicle with up to an aggregate purchase price as follows: (i) \$95,000 for the chief executive officer and (ii) \$75,000 for other executive officers. For those individuals utilizing the automobile allowance alternative, the auto allowance amount is set annually utilizing a prescribed formula. The administration of the leased alternative under the program is through a third party financing agency and, when the leased vehicle alternative is selected, the Company pays the monthly lease for such vehicle. Executive officers are either reimbursed for or provided gas, oil, maintenance and insurance for vehicles leased under this program by the Company. Participants in the auto program incur annual imputed income on the personal use of any vehicles under the program, including fuel and miles, as determined using the Internal Revenue Service Code rules.

Each Named Executive Officer also receives up to \$5,000 per calendar year of reimbursement for uninsured medical expenses with the Company also paying such executive's taxes on the amount of the benefit.

Tax and Accounting Considerations

The Company's compensation programs are affected by each of the following:

- Accounting for Stock-Based Compensation—The Company accounts for stock-based compensation in
 accordance with the requirements of ASC 718. The Company also takes into consideration ASC 718 and
 other generally accepted accounting principles in determining changes to policies and practices for its stockbased compensation programs.
- Section 162(m) of the Internal Revenue Code—This section limits the deductibility of compensation for our chief executive officer and our four other most highly compensated Named Executive Officers unless the compensation is less than \$1 million during any fiscal year or is "performance-based" under Section 162(m). Our 2001 Stock Plan is designed so that option grants thereunder are fully tax-deductible. Cash compensation and, historically, restricted stock awards are not granted under plans which have been so designed. We may from time to time pay compensation to our executive officers that may not be deductible when, for example, we believe that such compensation is appropriate and in the best interests of the stockholders after taking various factors into consideration, including business conditions and the performance of such executive officer.
- 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 believe that we have designed and operated any plans to appropriately comply with Section 409A.

Compensation Committee Interlocks and Insider Participation

During fiscal 2009, the Compensation and H.R. Committee of the Board consisted of Messrs. Vij (Chair), Hart and Krause and Dr. Rogerson. None of the members of the Compensation and H.R. Committee has been or is an officer or employee of Coherent. None of our executive officers serves on the board of directors or compensation committee of a company that has an executive officer that serves on our Board or Compensation and H.R. 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.

Compensation and H.R. Committee Report

The Compensation and H.R. 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 H.R. Committee recommended to the Board that the Compensation Discussion and Analysis be included in the proxy and the Company's Annual Report on Form 10-K.

Respectively submitted by THE COMPENSATION AND H.R. COMMITTEE

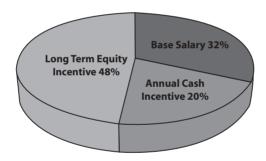
Sandeep Vij, Chair John Hart L. William Krause Garry Rogerson

Fiscal 2009 and Fiscal 2009 Compensation Pay Mix

The primary elements of our executive compensation program are base salary, an annual cash incentive award opportunity, and long-term equity incentive awards. For fiscal 2009, on average, 68% of our NEO's target compensation was delivered in the form of variable annual cash incentives or long-term equity incentives.

The average target pay mix for our named executive officers during fiscal 2009 can be illustrated as follows:

Average NEO Target FY09 Pay Mix



Note: the annual cash incentive amounts represent target awards based on base salary and target bonuses in effect during fiscal year 2009. The long term incentives include stock options (based on the dollar amount recognized for financial statement reporting purposes for fiscal 2009 in accordance with ASC 718) and restricted stock units (using the grant date face value).

Fiscal 2009 Summary Compensation Table

The table below presents information concerning the total compensation of our Named Executive Officers for the fiscal years ended October 3, 2009, September 27, 2008 and September 29, 2007.

Since no equity awards were granted to Named Executive Officers in fiscal 2007 other than the performance-based awards which vested in November 2006 as a result of fiscal 2006 performance, non-equity-based compensation accounted for all of the total compensation of the Named Executive Officers earned during fiscal 2007. The performance-based restricted stock units granted to Named Executive Officers described elsewhere are not reflected in the summary compensation table, as the single vesting date (and achievement determination) does not occur until fiscal 2011.

					Non-Equity		
			Stock	Option	Incentive Plan	All Other	
	Fiscal		Awards	Awards	Compensation	Compensation	
Name and Principal Position	Year	Salary (\$)	_(\$)(1)	(\$)(1)	(\$)(2)	(\$)	Total (\$)
(a)	(b)	(c)	(e)	(f)	(g)	(i)	(j)
John Ambroseo,	2009(3)	602,316	411,936	946,473	2,262	76,016 (4)	2,039,003
Chief Executive Officer and President	2008	561,312	246,003	1,666,688	534,621	80,676(4)	3,089,300
	2007	547,773	280,064	1,261,297	372,329	97,564(4)	2,559,027
Helene Simonet,	2009(3)	384,221	190,537	369,837	1,010	52,951 (5)	998,556
Executive Vice President and Chief	2008	359,334	118,392	663,063	239,649	62,142(5)	1,442,581
Financial Officer	2007	351,719	115,647	493,108	171,933	53,577(5)	1,185,984
Bret DiMarco,	2009(3)	311,658	151,685	205,602	585	38,138 (6)	707,669
Executive Vice President and General	2008	298,076	57,116	315,114	143,275	38,607(6)	852,188
Counsel	2007	250,077	6,294	67,579	142,271	13,487(6)	479,708
Luis Spinelli,	2009(3)	265,853	93,948	91,808	499	173,720 (7)	625,828
Executive Vice President and Chief	2008	252,862	46,182	116,615	120,635	137,041(7)	673,335
Technology Officer	2007	250,759	45,419	203,860	90,677	63,447(7)	654,162
Former Employees							
Ronald Victor,	2009	73,811	_	_	468	284,298 (8)	358,578
Executive Vice President, Human	2008	239,886	15,862	36,116	114,567	96,314(8)	450,768
Resources	2007	239,983	37,399	163,660	86,815	53,312(8)	581,169

⁽¹⁾ Reflects the dollar amount recognized for financial statement reporting purposes (disregarding an estimate of forfeitures related to service-based vesting conditions) for fiscal 2009 and 2008 in accordance with ASC 718, and includes grants made in fiscal 2009, 2008 and prior. For fiscal 2007, no awards were made and therefore the amounts for fiscal 2007 only include amounts awarded or granted prior to fiscal 2007. The amounts for stock awards includes both performance-based and time-based vesting restricted stock awards to the extent such awards had ASC 718 calculated value. The assumptions used in the valuation of these awards are set forth in Note 12, "Employee Stock Option and Benefit Plans" of the Financial Statements in our annual report on Form 10-K. These amounts do not correspond to the actual value that may ultimately be recognized by the Named Executive Officers.

⁽²⁾ Reflects the dollar amounts earned under the Variable Compensation Plan (VCP) during fiscal 2009, fiscal 2008 and fiscal 2007.

⁽³⁾ Reflects the dollar amount of salary earned in fiscal year 2009, which included an additional payroll period. Due to the timing of our fiscal year, fiscal year 2009 included 27 payroll periods compared to 26 payroll periods in fiscal 2008.

⁽⁴⁾ For fiscal 2009, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,541) and deferred compensation plan (\$20,402), (b) debt forgiveness which was reflected on Dr. Ambroseo's W-2 form during the first quarter of fiscal 2009 for his promissory note which was fully forgiven prior to the end of fiscal 2009 (\$10,000), (c) from the use of a Company-leased and maintained automobile ("Car Allowance") (\$29,760) and (d) reimbursed pursuant to executive medical reimbursement (\$10,236). For fiscal year 2008, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,501) and deferred compensation plan (\$19,356), (b) payment for buy-out of earned vacation (\$21,685), (c) debt forgiveness (see "Certain Relationships and Related Person Transactions — Related Person Transactions — Certain Transactions") (\$10,200), (d) from the use of a Company-owned and maintained automobile (\$8,539) and (e) reimbursed pursuant to executive medical reimbursement (\$5,463). For fiscal year 2007, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,500) and deferred compensation plan (\$37,139), (b) reflecting imputed income to Dr. Ambroseo from the sale of a

- Company car under the terms of the Company's auto policy described above, (c) for debt forgiveness (see "Related Person Transactions" below), (d) from the use of a Company-owned and maintained automobile and (e) reimbursed pursuant to executive medical reimbursement.
- (5) For fiscal 2009, includes amounts (a) contributed by us under the Company's 401(k) plan (\$12,048) and deferred compensation plan (\$8,058), (b) payment for buy-out of earned vacation (\$7,115), (c) Car Allowance (\$15,834) and (d) reimbursed pursuant to executive medical reimbursement (\$6,198). For fiscal year 2008, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,800) and deferred compensation plan (\$7,591), (b) payment for buy-out of earned vacation (\$17,255), (c) from the use of a Company-owned and maintained automobile (\$14,267) and (d) reimbursed pursuant to executive medical reimbursement (\$5,775). For fiscal year 2007, includes amounts (a) contributed by us under the Company's 401(k) plan (\$12,100) and deferred compensation plan (\$14,898), (b) from the use of a Company-owned and maintained automobile and (c) reimbursed pursuant to executive medical reimbursement.
- (6) For fiscal 2009, includes amounts (a) contributed by us under the Company's 401(k) plan (\$10,338) and deferred compensation plan (\$4,200), (b) Car Allowance (\$16,876) and (c) reimbursed pursuant to executive medical reimbursement (\$6,039). For fiscal year 2008, includes amounts (a) contributed by us under the Company's 401(k) plan (\$17,691), (b) from the use of a Companyowned and maintained automobile (\$15,835), and (c) reimbursed pursuant to executive medical reimbursement (\$4,447). For fiscal year 2007, includes amounts (a) contributed by us under the Company's 401(k) plan (\$3,462), (b) from the use of a Company-owned and maintained automobile and (c) reimbursed pursuant to executive medical reimbursement.
- For fiscal 2009, includes amounts (a) contributed by us under the Company's 401(k) plan (\$11,932) and deferred compensation plan (\$1,460), (b) Car Allowance (\$22,573), (c) earned under our patent award program where Mr. Spinelli was an inventor (\$15,618), (d) reimbursement for tax obligations arising under Section 409A as a result of the exercise of stock options with an exercise price less than fair market value as of the options grant date (these grants were made to Mr. Spinelli prior to him becoming an executive officer) (\$107,730) and (f) reimbursed pursuant to executive medical reimbursement (\$7,839). For fiscal year 2008, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,520) and deferred compensation plan (\$1,533), (b) payment for buy-out of earned vacation (\$13,612), (c) from the use of a Company-owned and maintained automobile (\$19,621), (d) reflecting imputed income to Mr. Spinelli from the sale of a Company car under the terms of the Company's auto policy (\$25,867), (e) earned under our patent award program where Mr. Spinelli was an inventor (\$5,048), (f) reimbursement for tax obligations arising under Section 409A as a result of exercise of stock options with an exercise price less than fair market value as of the options grant date (these grants were made to Mr. Spinelli prior to him becoming an executive officer) (\$54,223) and (g) reimbursed pursuant to executive medical reimbursement (\$8,494). For fiscal year 2007, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,467) and deferred compensation plan, (b) paid to Mr. Spinelli for buy-out of earned vacation, (c) from the use of a Company-owned and maintained automobile, (d) earned under our patent award program (\$15,647) where Mr. Spinelli was an inventor and (e) reimbursed pursuant to executive medical reimbursement.
- (8) For fiscal 2009, includes amounts (a) contributed by us under the Company's 401(k) plan (\$3,282) and deferred compensation plan (\$1,147), (b) paid to Mr. Victor for buy-out of earned vacation (\$23,953), (c) Car Allowance (\$5,000) and (d) retention agreement, single lump sum payment (\$250,000). For fiscal year 2008, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,500) and deferred compensation plan (\$893), (b) paid to Mr. Victor for buy-out of earned vacation (\$11,533), (c) from the use of a Company-owned and maintained automobile (\$22,183), (d) reflecting imputed income to Mr. Victor from the sale of a Company car under the terms of the Company's former auto policy (\$37,305) and (e) reimbursed pursuant to executive medical reimbursement (\$7,495). For fiscal year 2007, includes amounts (a) contributed by us under the Company's 401(k) plan (\$13,378), (b) paid to Mr. Victor for buy-out of earned vacation, (c) from the use of a Company-owned and maintained automobile and (d) reimbursed pursuant to executive medical reimbursement.

Grants of Plan-Based Awards in Fiscal 2009

Except as set forth in the footnotes, the following table shows all plan-based equity and non-equity incentive awards granted to our Named Executive Officers during fiscal 2009.

Grants of Plan-Based Awards

			Under N	ted Future on-Equity ¹ Plan Award	ncentive	Actual Payouts Under Non- Equity Incentive Plan	All Other Stock Awards: # of Securities Underlying	All Other Option Awards: # of Securities Underlying	Exercise or Base Price of Option	Grant Date Fair
Name	Туре	Grant Date	Threshold (\$)	Target (\$)	Maximum (\$)	Awards (\$)	Options (#)	Options (#)	Awards (\$)	Value (\$)(1)
John Ambroseo	Option RSU	11/17/2008 11/17/2008					28,550	75,600	23.16	688,194 661,218
	Q1 Bonus		0(2)	145,002	290,004	0				
	Q2 Bonus		0(2)	145,002	290,004	2,262(3)				
	Q3 Bonus		0(2)	145,002	290,004	0				
	Q4 Bonus		0(2)	145,002	290,004	0				
	Total		0(2)	580,008	1,160,016	2,262				
Helene Simonet	Option	11/17/2008						26,950	23.16	245,329
	RSU	11/17/2008					10,200			236,232
	Q1 Bonus		0(2)	64,748	129,497	0				
	Q2 Bonus		0(2)	64,748	129,497	1,010(3)				
	Q3 Bonus		0(2)	64,748	129,497	0				
	Q4 Bonus		0(2)	64,748	129,497	0				
	Total		0(2)	258,993	517,987	1,010				
Bret DiMarco	Option	11/17/2008						21,250	23.16	193,441
	RSU	11/17/2008					8,050			186,438
	Q1 Bonus		0(2)	37,500	75,000	0				
	Q2 Bonus		0(2)	37,500	75,000	585(3)				
	Q3 Bonus		0(2)	37,500	75,000	0				
	Q4 Bonus		0(2)	37,500	75,000	0				
	Total		0(2)	149,999	299,998	585				
Luis Spinelli	Option	11/17/2008						17,700	23.16	161,125
	RSU	11/17/2008					6,700			155,172
	Q1 Bonus		0(2)	32,001	64,002	0				
	Q2 Bonus		0(2)	32,001	64,002	499(3)				
	Q3 Bonus		0(2)	32,001	64,002	0				
	Q4 Bonus		0(2)	32,001	64,002	0				
	Total		0(2)	128,003	256,006	499				
Former Employee	Q1 Bonus		0(2)	29,986	59,972	0				
Ronald A. Victor	Q2 Bonus		0(2)	29,986	59,972	468(3)				
	Q3 Bonus		0(2)	29,986	59,972	0				
	Q4 Bonus		0(2)	29,986	59,972	0				
	Total		0(2)	119,943	239,886	468				

⁽¹⁾ Reflects the dollar amount recognized for financial statement reporting purposes (disregarding an estimate of forfeitures related to service-based vesting conditions) for fiscal 2009 in accordance with ASC 718, and includes grants made in fiscal 2009. The amounts for stock awards include time-based vesting restricted stock awards to the extent such awards had ASC 718 calculated value. The assumptions used in the valuation of these awards are set forth in Note 14, "Employee Stock Option and Benefit Plans" of the financial statements in our Annual Report on Form 10-K. These amounts do not correspond to the actual value that may ultimately be recognized by the Named Executive Officers.

Option Exercises and Stock Vested at 2009 Fiscal Year-End

The table below sets forth certain information for each Named Executive Officer regarding the exercise of options and the vesting of stock awards during the year ended October 3, 2009, including the aggregate value realized upon such exercise or vesting.

⁽²⁾ Failure to meet a minimum level of performance will result in no bonus paid out under the 2009 Variable Compensation Plan.

⁽³⁾ Reflects the amount earned in the first quarter of fiscal 2009 under the 2009 Variable Compensation Plan that was paid during the second fiscal quarter.

	Option A	wards	Stock	Awards
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
(a)	(b)	(c)	(d)	(e)
John Ambroseo	_	_	7,500	119,700
Helene Simonet	_		4,166	66,489
Bret DiMarco			3,333	53,195
Luis Spinelli			1,666	26,589

Outstanding Equity Awards at Fiscal 2009 Year-End

The following table presents information concerning unexercised options and stock that has not yet vested for each Named Executive Officer outstanding as of October 3, 2009.

Fauity incentive

Number of Securities Shares or Underlying Units of Stock Securities Unexercised Underlying Option Option Not Grant Options (#) Unexercisable Exercise Expiration Vested	Market Value of Shares or Units of Stock That Have Not Vested (\$)(3)	plan awards: Number of unearned shares, units or other rights that have not vested	payout value of unearned shares, units or other rights
Name Date Exercisable (1) Price(2) Date #		(#)	unearned shares, units or
John Ambroseo	655,794		
2/22/2008 — 15,000 2/22/2008 — 67,500(4)	344,550 1,550,475		
10/3/2007 250,000 — \$32.95 10/3/2013		0	0
3/30/2006 90,000 — \$35.01 3/30/2012			
4/7/2005 90,000 — \$33.71 4/7/2011			
3/25/2004 3,786 — \$26.41 3/25/2010			
3/25/2004 146,214 — \$26.41 3/25/2010			
Helene Simonet	234,294		
2/22/2008 — 8,334 2/22/2008 37,500(4)	191,432 861,375		
10/3/2007 100,000 — \$32.95 10/3/2013		0	0
3/30/2006 35,000 — \$35.01 3/30/2012			
4/7/2005 25,000 — \$33.71 4/7/2011			
3/25/2004 3,786 — \$26.41 3/25/2010			
3/25/2004 66,214 — \$26.41 3/25/2010			
Bret DiMarco	184,909		
2/22/2008 — 6,667 2/22/2008 — 30,000(4)	153,141 689,100		
10/3/2007 50,000 — \$32.95 10/3/2013		0	0
6/7/2006 10,000 — \$33.30 6/7/2012			
Luis Spinelli	153,900		
2/22/2008 — 3,334 2/22/2008 — 15,000(4)	76,582 344,550		
10/3/2007 15,000 — \$32.95 10/3/2013		0	0
3/30/2006 10,000 — \$35.01 3/30/2012			
4/7/2005 12,000 — \$33.71 4/7/2011			
3/25/2004 35,000 — \$26.41 3/25/2010			

⁽¹⁾ The grants vest in three equal annual installments beginning on November 17, 2009.

⁽²⁾ The exercise prices indicated are the prices originally recorded by the Company at grant and have not been adjusted to reflect any new measurement date as a result of the Company's historical stock option review.

⁽³⁾ Market Value is determined by multiplying the number of shares by \$22.97, the closing price of the Company's common stock on October 2, 2009, the last trading date of the fiscal year.

⁽⁴⁾ The performance-based restricted stock units vesting determination date is November 14, 2010. The performance based restricted stock units will vest in an amount which is 0-300% subject to the achievement of certain performance metrics. The amount reflected in the table is the maximum amount or 300%.

Fiscal 2009 Non-Qualified Deferred Compensation

The following table presents information regarding the non-qualified deferred compensation activity for each Named Executive Officer during fiscal 2009:

TD . . 4* .

Name	Executive Contributions in Last FY (\$)(1)	Executive Deferrals Including Company Contribution in Last FY (\$)	Registrant Contributions in Last FY (\$)(2)	Aggregate Earnings in Last FY (\$)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance of Last FYE (\$)(3)
John Ambroseo	59,401	79,804	20,402	53,565		3,506,960
SRP(4)	_		_	16,524		1,114,500
Helene Simonet	446	8,504	8,058	(6,279)		698,303
SRP(4)			_	(5,470)		142,698
Bret DiMarco	_	4,200	4,200	10		14,090
Luis Spinelli	28,137	29,597	1,460	(8,846)		418,105
SRP(4)		_	_	(34,378)		421,011
Former Employee						
Ronald Victor	22,127	23,274	1,147	(10,962)		776,997
SRP(4)	_	_	_	(160)	_	172,238

⁽¹⁾ Amounts in this column consist of salary and/or bonus earned during fiscal 2009, which is also reported in the Summary Compensation Table.

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 each our Named Executive Officers pursuant to the terms of the Change of Control Severance Plan. Other than this plan, there are no other employment agreements or other contractual obligations triggered upon a change of control. For purposes of this table, it is assumed that each Named Executive Officer's employment terminated at the close of business on October 2, 2009 (the last business day before the end of our fiscal year end on October 3, 2009). These payments are conditioned upon the execution of a form release of claims by the Named Executive Officer in favor of us. The amounts reported below do not include the nonqualified deferred compensation distributions that would be made to the Named Executive Officers following a termination of employment (for those amounts and descriptions, see the prior table). 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, of 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. The Total Benefit per individual in the table below does not add to the total of the individual components due to rounding within each component.

⁽²⁾ Amounts reflect Company contribution payments in excess of the Internal Revenue Code Sections 401(a)(17) and 402(g) qualified plan limits made to the non-qualified "Deferred Compensation Plan" for plan year 2008 made in fiscal 2009. Amounts reported in this column are also reported in the "All Other Compensation" column of the Summary Compensation Table.

⁽³⁾ The deferred compensation in a participant's account is fully vested and is credited with positive or negative investment results based on the plan investment options selected by the participant.

⁽⁴⁾ Amounts represent account balances and earnings from the Supplementary Retirement Plan (SRP) which was suspended. Deferrals (both executive and Company) into this plan have been suspended. The Deferred Compensation Plan is the only non-qualified deferred compensation plan currently available for executive officers.

Named Executive Officer	Multiplier for Base Salary and Bonus	Nature of Benefit	Termination for Cause	Any Other Termination
John Ambroseo	2.99X	Salary Severance	_	\$1,734,200
		Bonus Severance		\$1,734,200
		Equity Compensation Acceleration (1)		\$2,550,819
		Tax Gross Up (2)		\$2,443,887
		Health Insurance (3)		\$ 71,770
		Total Benefit		\$8,534,876
Helene Simonet	2X	Salary Severance		\$ 740,000
		Bonus Severance	_	\$ 518,000
		Equity Compensation Acceleration (1)		\$1,287,101
		Health Insurance (3)	_	\$ 33,318
		Total Benefit		\$2,578,419
Bret DiMarco	2X	Salary Severance		\$ 600,000
		Bonus Severance	_	\$ 300,000
		Equity Compensation Acceleration (1)		\$1,027,149
		Health Insurance (3)		\$ 47,847
		Total Benefit		\$1,974,996
Luis Spinelli	2X	Salary Severance		\$ 512,000
•		Bonus Severance		\$ 256,000
		Equity Compensation Acceleration (1)		\$ 575,031
		Health Insurance (3)		\$ 47,847
		Total Benefit		\$1,390,878

⁽¹⁾ Equity Compensation Acceleration is the in-the-money value of unvested stock options, time-based restricted stock units and performance-based restricted stock units, in each case as of October 2, 2009 at the closing stock price on that date (\$22.97). The value of accelerated stock options are thus calculated by multiplying the number of unvested shares subject to acceleration by the difference between the exercise price and the closing stock price on October 2, 2009; the value of accelerated restricted stock is calculated by multiplying the number of unvested shares subject to acceleration by the closing stock price on October 2, 2009. This assumes immediate release and vesting of the performance-based restricted stock units at the maximum, or 300% of target, achievement. The amounts reflected for Equity Compensation Acceleration do not reflect any applicable taxes, just gross proceeds. Since the table assumes a triggering event on October 2, 2009, only those stock options and restricted stock/RSU grants outstanding as of that date are included in the table.

The change in control plan provides for the payment of specified compensation and benefits upon certain terminations of the employment of the participants following a change in control of the Company. The Board has evaluated the economic and social impact of an acquisition or other change of control on its key employees. The Board recognizes that the potential of such an acquisition or change of control can be a distraction to its key employees and can cause them to consider alternative employment opportunities. The Board has determined that it is in the best interests of Coherent and its stockholders to assure that Coherent will have the continued dedication and objectivity of its key employees. The Board believes that the change of control plan will enhance the ability of our key employees to assist the Board in objectively evaluating potential acquisitions or other changes of control.

Furthermore, the Board believes a change of control plan aids us in attracting and retaining the highly qualified, high performing individuals who are essential to our success. The plan's assurance of fair treatment will ensure that key employees will be able to maintain productivity, objectivity and focus during the period of significant uncertainty that is inherent in an acquisition or other change of control. A change in control of Coherent is defined under the change

⁽²⁾ Estimated reimbursement (by way of a tax "gross-up") for a 20% excise tax that would be due under Section 4999 of the Internal Revenue Code of 1986 on a portion of the amounts reported.

⁽³⁾ Health Insurance is an estimate of the cost of covering the individual and his or her covered dependents for three years, in the case of the chief executive officer and for two years for the other Named Executive Officers.

of control plan as an occurrence of a business combination, an acquisition by any person directly or indirectly of fifty percent or more of the combined voting power of our common stock or a change in the composition of the Board where less than fifty percent are incumbent directors.

The change of control plan provides that if within 24 months after a change in control the executive's employment is terminated other than by reason of his or her death, disability, retirement or for cause, or the executive officer terminates his or her employment for "good reason," the executive will receive a lump sum severance payment equal to 2.99 (in the case of Dr. Ambroseo) or 2.0 (in the case of Ms. Simonet and Messrs. Spinelli and DiMarco) times the executive's annual base salary and annual bonus (assuming achievement of all performance requirements thereof). "Good reason" is defined in each Agreement as any of the following that occurs after a change in control of the Company: certain reductions in compensation; certain material changes in employee benefits and perquisites; a change in the site of employment; reduction in the executive's duties and responsibilities; the Company's failure to obtain the written assumption by its successor of the obligations set forth in the Agreement; attempted termination of employment on grounds insufficient to constitute a basis of termination for cause under the terms of the change of control plan; or the Company's breach of any of the provisions of the change of control plan. Under the terms of the plan, the executives will also have acceleration of all vesting conditions for equity grants and health care for the executive (and his or her covered family members) will be provided on the same terms for two years and, in the case of Dr. Ambroseo, three years. Further, Dr. Ambroseo will receive a gross-up for any Internal Revenue Code section 280G ("280G") excise taxes to the extent that the severance benefits are more than 20% over the limit imposed by 280G (i.e., more than 3.59x the "base amount" as defined by Section 280G). If the benefits are less than 20% over the limit, the benefits will be reduced to the extent necessary so that no 280G excise tax is triggered. To the extent 280G is triggered as a result of the severance benefits for the other executive participants, such payments will either be paid in full or reduced so that the executive receives the maximum severance benefit without triggering 280G.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of October 3, 2009 about the Company's equity compensation plans under which shares of our common stock may be issued to employees, consultants or members of our Board:

Plan	(a) Number of securities to be issued upon exercise of outstanding options, warrants and	(b) Weighted- average exercise price of outstanding options, warrants and	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in
category	rights	rights	column (a))
Equity compensation plans approved by security holders	2,850,048 (1)	\$ 27.41	3,628,090 (2)(3)
Equity compensation plans not approved by security holders	_	_	
Total	2,850,048	\$ 27.41	3,628,090

⁽¹⁾ This number does not include any options which may be assumed by us through mergers or acquisitions, however, we do have the authority, if necessary, to reserve additional shares of common stock under these plans to the extent necessary for assuming such options.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Review, Approval or Ratification of Related Person Transactions

In accordance with the charter for the Audit Committee of the Board, 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.

⁽²⁾ This number of shares includes 473,808 shares of common stock reserved for future issuance under the Employee Stock Purchase Plan, 124,000 shares reserved for future issuance under the 1998 Director Plan and 3,030,282 shares reserved for future issuance under the 2001 Stock Plan.

⁽³⁾ The 1998 Director Plan provides for annual increases to the number of shares available for issuance under the 1998 Director Plan so that the total number of shares reserved is not less than 150,000 shares.

Related Person Transactions

Certain Transactions

On January 5, 2009, the Company entered into an amendment to its agreement with Oliver Press Partners, LLP and certain of its affiliates ("OPP"), including Clifford Press, who was a member of our Board during fiscal 2009. The agreement provides that our Board would include Mr. Press in the slate of directors for election at the annual meeting of the stockholders held in 2009 and that the signatories to the agreement will not seek to call a special meeting or other actions relating to the election of directors for one year. In addition, Mr. Press agreed to submit his resignation as a director if OPP ceases to hold at least 50% of the common stock of the Company that OPP and its affiliates currently hold as a group. The settlement agreement includes certain standstill restrictions that commenced upon the execution of the settlement agreement and will expire on the first anniversary of our 2009 annual meeting. Under the terms of the standstill restrictions, neither OPP nor any of its affiliates may, among other things, (i) submit or encourage any other person or group to nominate directors for election to our Board, (ii) submit any stockholder proposals, (iii) call an annual or special meeting of stockholders, (iv) solicit proxies from stockholders of the registrant, (v) change the composition of the Board. The standstill restrictions contain certain exceptions that, among other things, permit OPP to seek to change the composition of the Board at the 2010 annual meeting by submitting nominees for election and to solicit proxies in favor of such nominees for the 2010 annual meeting. In addition, during the effective period of the standstill restrictions described above, OPP agreed that it would cause any shares of our common stock that it owns to be voted in accordance with the recommendation of our Board if Mr. Press has approved and joined in any such recommendation. Mr. Press resigned as a member of the Board in November 2009.

Other Matters

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. 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 either in person or by telephone during fiscal 2009. In the course of these meetings, the Audit Committee met with management, the internal auditors and our independent auditors 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 2009 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 Statement on Auditing Standards No. 61, as amended, (AICPA, *Professional Standards*, Vol. 1 AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T, 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 Audit Committee concerning independence and has discussed Deloitte & Touche LLP's independence with Deloitte & Touche LLP.

Management has reviewed the audited financial statements for fiscal 2009 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 (and the Board has approved) that the audited financial statements be included in the annual report on Form 10-K for the fiscal year ended October 3, 2009, for filing with the SEC.

Respectively submitted by THE AUDIT COMMITTEE

Lawrence Tomlinson, Chair Susan James John Hart

OTHER MATTERS

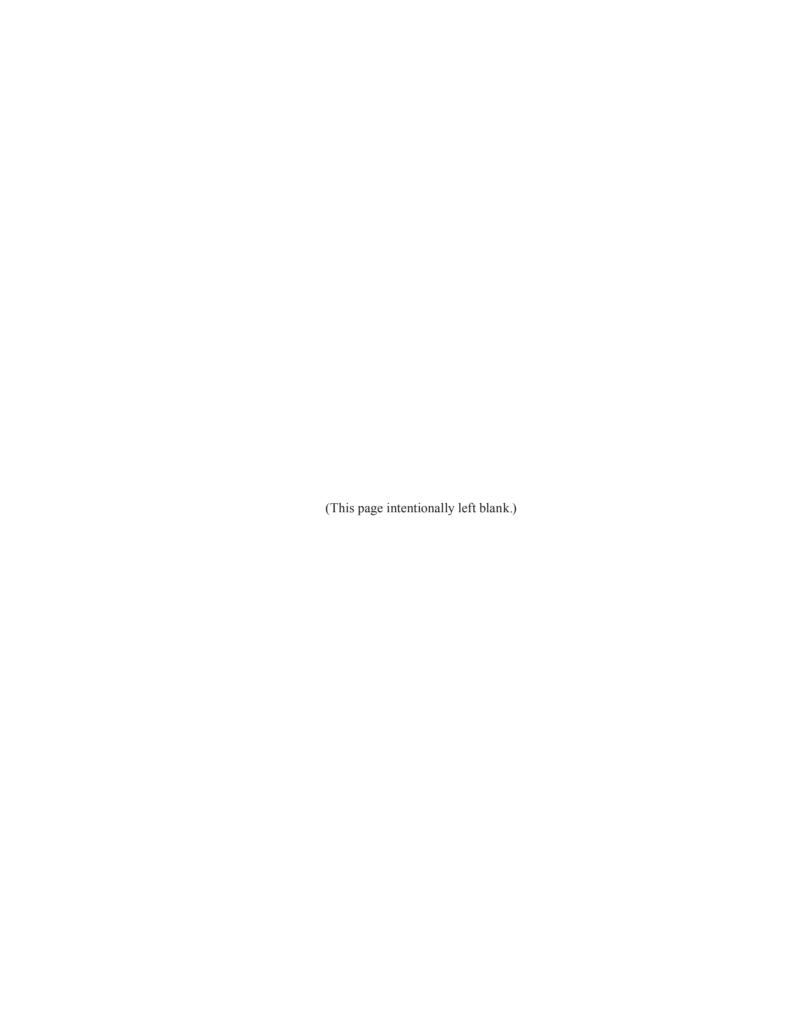
We know of no other matters to be submitted to the meeting. If any other matters properly come before the meeting, it is the intention of the persons named in the enclosed form Proxy to vote the shares they represent as the Board may recommend.

BY ORDER OF THE BOARD OF DIRECTORS

Dated: February 22, 2010 /s/ John R. Ambroseo

John R. Ambroseo

President and Chief Executive Officer



UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)				
×			CTION 13 OR 15(d) OF THE S	ECURITIES
	EXCHANGE	ACT OF 1934	5 1 10 / 1 2 2000	
			Ended October 3, 2009 or	
		N REPORT PURSUANT TO ACT OF 1934	O O SECTION 13 OR 15(d) OF T Number: 001-33962	HE SECURITIES
		COHER	ENT, INC.	
	(State or oth	laware er jurisdiction of	(I.R.S	1622541 Employer
7100 D		n or organization)		ication No.)
		ive, Santa Clara, California ipal executive offices)		9 5054 p Code)
(` .	,	` .	,
	Re	-	ncluding area code: (408) 764-40	000
		Securities registered pursua	nt to Section 12(b) of the Act:	
_	Т	itle of each class	Name of each exch on which registe	8
	Common	Stock, \$0.01 par value	The NASDAQ Stock N	Market LLC
		Securities registered pursuant	to Section 12(g) of the Act: None	
Indica	te by check mark if the	ne registrant is a well-known seasoned	d issuer, as defined in Rule 405 of the Se	ecurities Act. Yes 🗆 No 🗷
Indica	te by check mark if the	ne registrant is not required to file rep	orts pursuant to Section 13 or Section 1	5(d) of the Act. Yes □ No 🗷
of 1934 during th		s (or for such shorter period that the r	ports required to be filed by Section 13 or registrant was required to file such repo	
File required to b	e submitted and poste		tronically and posted on its corporate V S-T ($\S229.405$ of this chapter) during the Yes \square No \square	
contained, to the	-	nowledge, in definitive proxy or inform	t to Item 405 of Regulation S-K is not comation statements incorporated by refer	
			ted filer, an accelerated filer, a non-accel "smaller reporting company" in Rule 1	
Large acce	lerated filer □	Accelerated filer 🗷	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company □
Indica	te by check mark who	ether the registrant is a shell company	(as defined in Rule 12b-2 of the Exchai	nge Act). Yes □ No 🗷
	•		re outstanding. The aggregate market va	,
			09 of Coherent Inc. held by nonaffiliat	

DOCUMENT INCORPORATED BY REFERENCE

the Act. This determination of affiliate status is not necessarily conclusive.

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

Portions of the registrant's Proxy Statement for the registrant's fiscal 2010 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, 2009.

TABLE OF CONTENTS

PART I		
ITEM 1.	BUSINESS	1
ITEM 1A.	RISK FACTORS.	13
ITEM 1B.	UNRESOLVED STAFF COMMENTS.	26
ITEM 2.	PROPERTIES	26
ITEM 3.	LEGAL PROCEEDINGS.	26
ITEM 4.	SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS	27
PART II		
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	28
ITEM 6.	SELECTED FINANCIAL DATA	30
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	31
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	47
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	48
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	48
ITEM 9A.	CONTROLS AND PROCEDURES.	49
ITEM 9B.	OTHER INFORMATION	51
PART III		
ITEM 10.	DIRECTORS AND EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	51
ITEM 11.	EXECUTIVE COMPENSATION	52
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	52
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE	52
ITEM 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	52

This Annual Report contains forward-looking statements. These forward-looking statements include, without limitation, statements regarding our future:

- net sales;
- bookings;
- results of operations;
- gross profits;
- access to new markets:
- research and development projects and expenses;
- selling, general and administrative expenses;
- optimization of financial returns;
- warranty reserves;
- legal proceedings;
- claims against third parties for infringement of our proprietary rights;
- claims by third parties against us for infringement of their proprietary rights;
- liquidity and sufficiency of existing cash, cash equivalents and short-term investments for near-term requirements;
- increased adoption of lasers;
- estimates and forecasts included within our accounting for goodwill and intangibles;
- success or impact of new product offerings;
- future demand for our products and laser technology;
- maintenance of customer relationships and the development of new relationships;
- capital spending as a percentage of net sales;
- development and acquisition of new technology and market share;
- write-downs for excess or obsolete inventory;
- adoption of/use of lasers in the manufacture of solar cells;
- development of highly-differentiated products;
- operational efficiencies;
- competitors and competitive pressures;
- capital spending as a percentage of net sales;
- growth of applications for our products, new product introductions and increase of market share;
- obtaining components and materials in a timely manner;
- identifying alternative sources of supply for components;
- achieving adequate manufacturing yields;
- the impact of recent acquisitions;
- leveraging of power and energy management products into our next generation products;
- compliance with environmental regulations;
- enhancement of our market position;
- focus on organizational efficiency;

- impact on laser industry;
- participation in the bio-agent detection market;
- leveraging of our technology portfolio and application engineering;
- optimization of our leadership position in existing markets;
- maintenance of collaborative customer and industry relationships;
- enhancement of our market position through our existing technology, as well as developing new technologies;
- emphasis on supply chain management;
- use of financial market instruments;
- simplifications of our foreign legal structure and reduction of our presence in certain countries;
- growth rates in the scientific market;
- footprint consolidation efforts, including the expected savings therefrom and timing thereof; and
- focus on long-term improvement of adjusted earnings before interest, taxes, depreciation and amortization (EBITDA) as a percentage of net sales.

In addition, we include forward-looking statements under the "Our Strategy" and "Future Trends" headings set forth below in "Business" and under the "Bookings" heading set forth below in "Management's Discussion and Analysis of Financial Condition and Results of Operations."

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 "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and under the heading "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.

PART I

ITEM 1. BUSINESS

GENERAL

Business Overview

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2009, 2008 and 2007 ended on October 3, September 27, and September 29, respectively, and are referred to in this annual report as fiscal 2009, fiscal 2008 and fiscal 2007 for convenience. Fiscal year 2009 included 53 weeks; fiscal years 2008 and 2007 included 52 weeks.

We are one of the world's leading suppliers of photonics based solutions in a broad range of commercial and scientific research applications. We design, manufacture, service and market lasers and related accessories for a diverse group of customers. 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 operating segments: Commercial Lasers and Components ("CLC") and Specialty Lasers and Systems ("SLS"). This segmentation reflects the go-to-market strategies for various products and markets. While both segments deliver cost-effective photonics solutions, CLC focuses on higher volume products that are offered in set configurations. The product architectures are designed for easy exchange at the point of use such that substantially all product service and repairs are based upon advanced replacement and depot (i.e., factory) repair. CLC's primary markets include materials processing and original equipment manufacturer ("OEM") components and instrumentation. SLS develops and manufactures configurable, advanced performance products largely serving the microelectronics, OEM components and instrumentation and scientific research and government programs markets. The size and complexity of many of the SLS products require service to be performed at the customer site by factory- trained field service engineers.

Effective as of the beginning of the first quarter of fiscal 2009, management moved the DPSS Germany and Crystal product families from the CLC segment into the SLS segment. This concentrates all DPSS product families in the SLS segment. All reporting has been aligned to reflect the revised reportable operating segments (CLC and SLS) and prior periods have been restated. See additional discussion in Note 18. "Segment and Geographic Information" of our Notes to Consolidated Financial Statements.

Income (loss) from operations is the measure of profit and loss that our chief operating decision maker ("CODM") uses to assess performance and make decisions. Income (loss) from 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 to our operating segments certain operating expenses, which we manage separately 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.

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, Inc.

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 cutting 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 the beam energy is confined to a narrow wavelength band. Some lasers can be used to create ultrafast output—a series of pulses with pulse durations as short as tens of femtoseconds (i.e., 10^{-15} seconds).

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 or solid state crystal. We manufacture all of these types of lasers. Lasers can also be classified by their output wavelength: ultraviolet, visible, infrared or wavelength tunable. We also 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 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 broad industries that include industrial automation, textile processing, microelectronics, flat panel displays 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 technology 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 (e.g. the production of sub 50 micron microvias).

Key laser applications include: micro and nanotechnologies; solar cell production; semiconductor inspection; microlithography; measurement, test and repair of electronic circuits; flat panel display manufacturing; medical and bio-instrumentation; industrial process and quality control; materials processing; imaging and printing; graphic arts and display; and, research and development. For example, ultraviolet ("UV") lasers are enabling the move towards miniaturization, which drives innovation and growth in many markets. The short wavelength of lasers that produce light in the UV spectral region makes it possible to manufacture extremely small structures with maximum precision—consistent with the latest state-of-the-art technology.

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:

- 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. We plan to utilize our expertise to expand into new markets, such as laser based processing development tools for solar manufacturing and high power materials processing solutions.
- 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.
- 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 expressed as a percentage of net sales—We define adjusted EBITDA as earnings before interest, taxes, depreciation, amortization, stock compensation expenses and certain other non-operating income and expense items. Key initiatives to reach our goals for EBITDA improvements include our program of consolidating manufacturing locations, rationalizing our supply chain and selective outsourcing of manufacturing operations.

APPLICATIONS

Our products address a broad range of applications that we group into the following markets: Microelectronics, Scientific Research and Government Programs, OEM Components and Instrumentation and Materials Processing.

Microelectronics

Nowhere is the trend towards miniaturization more prevalent than in the Microelectronics market where portable music, video and wireless communications technology are driving advances in integrated circuits, power management, and displays. In response to market demands and 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 support four major markets in the microelectronics industry: (1) semiconductor front-end, (2) advanced packaging and interconnects, (3) flat panel display manufacturing, and (4) solar cell production and other emerging processes.

Microelectronics—semiconductor front-end

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

Semiconductor inspection, metrology, testing and wafer yield management

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. For example, automated laser-based inspection systems are now used to detect and locate defects as small as 0.01 micron, which may not be observable by conventional optical microscopes.

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, Sapphire, and Verdi lasers are used to detect and characterize defects in semiconductor chips.

Microelectronics—advanced packaging and interconnects

Wafer scribing and singulation

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. In terms of materials, this search includes new types of wafers based on low-k materials and thinner silicon. Our AVIA and Matrix lasers are providing economic methods of cutting and scribing these wafers while delivering higher yields than traditional mechanical methods. Our DIAMOND carbon dioxide ("CO₂") lasers are used for singulating packages and printed circuit boards into individual components for final assembly. Our Talisker lasers are used in a broad range of applications requiring high precision and low heat damage, such as in thin wafer cutting and drilling.

Microvia drilling

These same trends are also driving integration and miniaturization, blurring the traditional lines between formerly discrete applications such as assembly and printed circuit board ("PCB") fabrication. Lasers are playing several enabling roles in this integration and miniaturization. For instance, lasers are now the only economically practical method for drilling microvias in chip assemblies and in both rigid and flexible printed circuit boards. These microvias are tiny interconnects that are essential for enabling high-density circuitry commonly used in mobile handsets and advanced computing systems. Our AVIA and DIAMOND lasers are the lasers of choice 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.

Other applications have developed as well. For instance, the high density of the latest circuit boards is reaching the limits of conventional printing technologies, causing wider adoption of laser direct write methods. Our Paladin laser is used for this application.

Microelectronics—flat panel display manufacturing

The high-volume consumer market is driving the production of flat panel displays ("FPDs") in applications such as mobile telephones, laptop computers, television monitors, digital cameras, personal digital assistants ("PDAs") and car navigation systems. There are several types of established and emerging displays based on quite different technologies, including plasma ("PDP"), liquid crystal ("LCD") and organic polymers ("OLED"). Lasers have found applications in each of these technologies given that the laser provides higher process speed, better yield, lower cost and/or superior display brightness and resolution.

Excimer Laser Annealing ("ELA") and Sequential Lateral Solidification

Several display types require a high-density pattern of silicon Thin Film Transistors ("TFTs"). If this silicon is polycrystalline, the performance is greatly enhanced. In the past, these polysilicon layers could only be produced on expensive special glass at high temperatures. However, excimer based processes, such as ELA and sequential lateral solidification, have allowed high-volume production of low-temperature polysilicon ("LTPS") on conventional glass substrates. Our excimer lasers provide an invaluable solution for both ELA and sequential lateral solidification because they are the only industrial-grade excimer lasers with the high pulse energy these methods require. The current state-of-the-art product for this application is our Lambda SX laser.

Our AVIA and DIAMOND lasers are also used in other production processes for FPDs. These processes include drilling, cutting, patterning, marking and yield improvement.

Microelectronics—solar cell production and other emerging processes

Numerous areas of microelectronics can be grouped as "emerging technologies." Some of these are transitioning to volume production in the present timeframe while others are more forward-looking.

Today's higher energy costs have led to heightened interest in solar panels. The recent growth and interest in solar cell technology coupled with the intense focus on improving cell efficiency, is driving the adoption of laser technology in the manufacturing of solar cells. Our lasers, such as AVIA, Paladin, Prisma and Talisker, are already being used in the production of solar panels for cell isolation and transparent conductive oxide ("TCO") scribing purposes.

We have introduced new laser sources and laser systems to address other aspects of solar cell production, including the Mamba, a new high pulse energy diode-pumped solid-state ("DPSS") laser, the Coherent Equinox laser system and the Aethon laser system.

Scientific Research 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 Chameleon, COMPexPro, Evolution, Legend, Libra, MBD, MBR, Micra, Mira 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.

Subsequently, 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 (multi-photon and confocal microscopy); engineering (material modification, interferometry, remote sensing and metrology); physical chemistry (quantum control, molecular spectroscopy, pump and probe experiments); and physics (atomic and Raman spectroscopy, atom cooling, nonlinear optics, extreme UV and X-ray generation, solid-state and semiconductor studies). Most of these applications require the use of ultrafast lasers generating pulses as short as few tens of femtoseconds (10⁻¹⁵ 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.

OEM Components and Instrumentation

Instrumentation is one of our more mature commercial applications. Representative applications within this market include bio-instrumentation, graphic arts and display and medical OEMs. We also support the laser-based instrumentation market with a range of laser-related components, including diode lasers for optical pumping. Some of 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

Bio-instrumentation applications for lasers include bio-agent detection for point source and standoff detection of pathogens or other bio-toxins; 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 that provides 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; and flow cytometry for analyzing single cells or populations of cells in a heterogeneous mixture, including blood samples. Specifically, our Sapphire, Compass and Coherent CUBE lasers are used in several bio-instrumentation applications.

Graphic Arts and Display

There are numerous applications in the graphic arts and display markets where our lasers are now playing key roles. For instance, in the area of printing, our DIAMOND series lasers are used in the engraving of anilox rollers for flexo-plate and screen-printing; our Compass lasers and some of our high-power semiconductor lasers are now widely used for computer-to-plate printing, an environmentally friendly process that saves production time by writing directly to plates; and our CUBE lasers are used in the imaging of offset plates for computer-to-plate printing. In addition, our Genesis lasers address the laser light show display market and have experienced strong traction due to their performance and cost features.

Medical Therapy ("OEM")

We sell a variety of components and lasers to medical laser companies in end-user applications such as ophthalmology, aesthetic, surgical, therapeutic and dentistry. Our DIAMOND series CO₂ lasers are widely used in ophthalmic, aesthetic and surgical markets. Our Compass and Sapphire series of lasers are used in the retinal scanning market in diagnostic imaging systems as well as new ground breaking in-vivo imaging applications. In addition, we have a leading position in Lasik and PRK refractive surgery methods with our ExciStar XS excimer laser platform.

The unique ability of our 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. The 577nm wavelength was designed to match the peak in absorption of oxygenated hemoglobin thereby allowing treatment to occur at a lower power level, and thus reducing stress and heat-load placed on the eye with traditional green-based (530nm) solid state lasers. This technology is finding traction with both medical OEMs and ophthalmologists.

Materials Processing

Lasers are widely accepted today in many important industrial manufacturing applications including cutting, welding, joining, drilling, perforating, and marking of metals and nonmetals. We supply high-power lasers for metal processing and low-to-medium power lasers for laser marking, nonmetals processing and precision micromachining.

Heavy manufacturing

Industrial laser systems are used for cladding and hardening of metals, joining materials, and other materials processing applications. Other applications include welding of plastics and direct metal welding. In April 2007, we acquired Nuvonyx, Inc., a technology leader in high-power laser diode components, arrays, and industrial laser systems for materials processing and defense applications. Nuvonyx produces high power arrays with powers in excess of 50 Kilowatts through its proprietary cooling and stacking technologies. Our HighLight product is a direct diode system for metal processing based on the Nuvonyx technology. Complementing our progress into higher powered lasers, in fiscal 2009, we introduced the DIAMOND E 1000, the highest power, completely sealed CO_2 laser for use in materials processing.

Laser marking and coding

Laser marking and coding are generally considered part of the precision materials processing applications market for which we remain a leading supplier. One such area where applications are growing rapidly is the displacement of ink-jet coding due to both aesthetic and environmental pressures. The optimum choice of laser depends on the material being marked, whether it is a surface mark (engraved) or a sub-surface mark, and the specific economics of the application. We provide lasers for all-important marking applications. Our Matrix product line is a reliable, compact and low-cost diode pumped solid state laser that provides lower cost of ownership for marking in high volume manufacturing.

Light manufacturing and cutting

This area includes such applications as the cutting and joining of plastics using both our DIAMOND CO₂ lasers and FAP Systems semiconductor lasers; the cutting, perforating and scoring of paper and packaging materials; and various cutting and patterning applications in the textile industry. In the specific area of textiles and clothing, our DIAMOND lasers service older applications, such as cutting complex shapes in leather for footwear, as well as newer applications such as creating detailed fade patterns on designer denims.

At the opposite end of the wavelength spectrum, our AVIA and Matrix ultraviolet lasers are now being used extensively for machining a wide range of materials (and in a wide range of industries) including glass and plastics. These technically important materials are laser processed to produce medical devices, micro-electro-mechanical systems ("MEMS"), flat panel display, semiconductor manufacturing, and to aid in rapid prototyping for a variety of end markets including automotive manufacturing.

FUTURE TRENDS

Microelectronics

After several years of process development, lasers are now used in mass production applications because these laser-based fabrication and testing methods are faster, deliver superior end products, increase yields, and /or cut production costs. We anticipate this trend to continue, driven primarily by the increasing sophistication of consumer electronic goods and their convergence via the internet, resulting in increasing demand for more bandwidth and memory. Although this market is cyclical in nature, and is affected by the current economic climate, we believe that as the market recovers, we will see an increased adoption of solid-state, CO₂ and excimer lasers, as all these lasers enable performance improvements and reduced process costs. In particular, we expect future demands in the advanced packaging market to steadily shift towards the use of ultraviolet laser-based tools, since these are the only commercial technologies capable of providing the high spatial resolution critical for next-generation chip-scale and wafer-level packages.

Lasers have emerged as an essential technology in the manufacturing of solar cells. We expect that this trend will continue over the next few years as solar cell manufacturing capacity increases. There will be a need for laser sources and systems in both process development and production tools as the need for higher solar cell efficiency increases.

Scientific research and government programs

The scientific market has been stable in the present unpredictable economic environment. We expect modest growth rates in the scientific research market for fiscal 2010, with applications in ultrashort pulses and in bio-research being the drivers of this anticipated expansion. We anticipate an increasingly competitive market in which we expect to retain and improve our market share through new product development and maintain our service commitment to this area.

OEM components and instrumentation

The instrumentation market is seeing a gradual migration from the use of mature laser technologies, such as water-cooled ion gas lasers, to new technologies, primarily based on solid state and semiconductors. Using our unique portfolio of solid-state and semiconductor lasers, and our patented OPSL technology, we are able to both assist and stimulate this transition as well as to be the technology of choice for developing applications such as security and clinical diagnostics. These applications are likely to require an increased number of lasers; however, the majority of these activities are still in the research and development stage and we expect only moderate impacts on the laser industry in fiscal 2010, with increases expected in future years. Our OPSL technology resulted in the first truly continuous solid-state UV laser which enables the use of UV in a clinical as well as a research environment. Furthermore we anticipate greater future opportunities in bio-instrumentation, including DNA sequencing, drug discovery, flow cytometry, and microscopy, based on our product enhancements and evolving market developments. Our newer laser technologies are the basis of a number of clinical procedures. In the area of photocoagulation, the Genesis OPSL yellow lasers are being used as the wavelength is particularly suitable for the treatment of blood vessels. In aesthetic laser surgery, we are an OEM supplier of CO₂ lasers to the major manufacturers of aesthetic equipment used in the latest procedures for skin enhancement.

Materials processing

The market for low to medium power lasers used in industrial materials processing is uncertain in the immediate future; however, these lasers represent a cost-effective manufacturing solution for cutting, joining, marking and engraving of non-metal materials including marking/coding, flat bed cutting, engraving, as well as the production of capital equipment for apparel and leather goods manufacturing. Several factors are enabling us to gain market share in the materials processing market. First, we have

developed an expanded portfolio of lasers with a broad spectrum of wavelengths, enabling optimum marking solutions for virtually every metal and non-metal material type. At the same time, the reliability of these products has been achieved at even higher levels, lowering the cost of ownership.

The acquisition of Nuvonyx in April 2007 provided us an entry into the high-power materials processing market. Combined with our capability in laser diode bars, this acquisition represents both a vertically integrated and more cost effective approach than many applications currently served by other lasers. In 2009, we continued to expand our product line into this market area with the development of both high power sealed CO_2 lasers and fiber delivered direct diode systems. The market for high power lasers for materials processing is uncertain in the immediate future.

PRODUCTS

We design, manufacture and market lasers, precision optics and related accessories for a diverse group of customers. The following table shows selected products together with their applications, the markets they serve and the technologies upon which they are based.*

Market Application	Application	Technology
Microelectronics	Advanced packaging and interconnects	$\overline{\mathrm{CO}_2}$
		DPSS
		Fiber
	Flat panel display	CO_2
		DPSS
		Excimer
	Semiconductor front-end	DPSS
		OPSL
	Solar cell production and other emerging processes	DPSS
		Fiber
Scientific research and government	All scientific applications	CW Tunable
programs		DPSS
		Excimer
		OPSL
		Ultrafast
OEM components and	Bio-Instrumentation	DPSS
instrumentation		OPSL
		Semiconductor
		Ultrafast
	Graphic arts and display	OPSL
	Medical therapy (OEM)	CO_2
		DPSS
		Excimer
		OPSL
		Semiconductor
Materials processing	Heavy manufacturing	CO_2
		Fiber Semiconductor
	Laser marking and coding	CO_2
		DPSS
	Light manufacturing and cutting	CO_2
	- -	DPSS
		Excimer
		Semiconductor

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

In addition to products we provide, we invest routinely in the core technologies needed to create substantial differentiation for our products in the marketplace. Our semiconductor and crystal 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

Continuous Wave ("CW") tunable Lasers

CW tunable lasers use special crystals as their active medium and are energized or "pumped" by a DPSS green laser. CW tunable lasers generate laser light that can be tuned between 700 and 1050 nm, covering the near-Infrared region of the spectrum. Using non-linear crystal frequency conversion, these lasers can also generate near UV and visible light. The output of these lasers can be filtered to produce very narrow linewidths, enabling scientific techniques like high-resolution spectroscopy of atoms and molecules.

Diode-pumped solid-state ("DPSS") lasers

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

Fiber lasers

Fiber lasers use semiconductor lasers to pump a doped optical fiber to produce a laser beam. In fiscal 2008, we launched our first product based on fiber laser technology, the Talisker. This is an industrial ultrafast laser system which incorporates fiber laser technologies as a key part of the laser design. The Talisker is a new laser platform based on a fiber oscillator and crystal amplifier and illustrative of our strategy of developing and incorporating fiber lasers where they can generate unique and cost-effective performance. We expect the Talisker platform will lead to a series of new ultrafast lasers for a number of commercial markets including microelectronics and medical. In fiscal 2009, we demonstrated a 1KW fiber laser product based on our high power diode laser system, the Highlight 1000F. This prototype demonstrated the platform for a scalable, kilowatt class fiber laser based on a bar pumping design. Due to packaging efficiency, diode bars reduce the overall cost of a fiber laser.

Fiber laser technology continues to be an important investment and product development area and we anticipate more products that incorporate fiber as the active gain medium.

Gas lasers (CO₂, Excimer, Ion)

The breadth of our gas laser portfolio is industry leading, encompassing CO₂, excimer and ion 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, and materials processing applications.

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 and graphic arts and display markets. In fiscal 2009, our Genesis yellow laser continued to make progress in ophthalmology and we have expanded our offerings in the area of entertainment lighting using a variety of products across the visible spectrum. We also continued to expand our ultraviolet version of the OPSL platform called the Genesis, which was developed for the bio-instrumentation market.

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 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, military and industrial applications, including aesthetic (hair removal, cosmetic dentistry), graphic arts, counter measures, rangefinders, target designators, and plastic welding.

Ultrafast ("UF") Lasers

Ultrafast lasers are lasers generating light pulses with durations of a few femtoseconds (10-15 seconds) to a few tens of picoseconds (10-11 seconds). These types of lasers are primarily used for scientific research and also finding use in sophisticated materials processing applications. Ultrafast lasers are usually pumped by a green DPSS laser. 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 10-500 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 UF ablation of materials with minimal thermal damage.

SALES AND MARKETING

We market our products domestically through a direct sales force. Our foreign sales are made principally to customers in Europe, Japan and other Asia-Pacific countries. We sell internationally through direct sales personnel located in Canada, France, Germany, Italy, Japan, the Netherlands, the People's Republic of China, South Korea, and the United Kingdom, as well as through independent representatives in other parts of the world. Foreign sales accounted for 66% of our total net sales in fiscal 2009 and 68% of total net sales in fiscal 2008 and fiscal 2007. 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. Our products are broadly distributed and no one customer accounted for more than 10% of total net sales during fiscal 2009, 2008 or 2007.

We maintain a customer support and field service staff in major markets within the United States, Europe, Japan, China 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. Warranties on some of our products and services may be shorter or longer than one year. 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 is approximately 15 months.

RESEARCH AND DEVELOPMENT

We are committed to the development of new products, as well as the improvement and refinement of existing products, including better cost-of-ownership. Our development efforts are focused on designing and developing products, services and solutions that anticipate customers' changing needs and emerging technological trends. Our efforts are also focused on identifying the areas where we believe we can make valuable contributions. Research and development expenditures for fiscal 2009 were \$61.4 million, or 14.1% of net sales compared to \$74.3 million, or 12.4% of net sales for fiscal 2008, and \$74.6 million, or 12.4% of net sales for fiscal 2007. We work closely with customers, both individually and through our sponsored seminars, to develop products to meet customer application and performance needs. In addition, we are working with leading research and educational institutions to develop new photonics based solutions.

MANUFACTURING

Strategies

One of our core manufacturing strategies is to tightly control our supply of key parts, components, sub-assemblies and outsourcing partners. We primarily utilize vertical integration when we have proprietary internal capabilities that are not available from external sources cost-effectively. We believe this is essential to maintain high quality products and enable rapid development and deployment of new products and technologies. We provide customers with 24-hour technical expertise and quality that is International Organization for Standardization ("ISO") certified at our principal manufacturing sites.

Committed to quality and customer satisfaction, we design and produce many of our own components and sub-assemblies in order to retain quality 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. We have consolidated and closed certain of our manufacturing facilities in order to reduce our footprint, realize synergies, and improve our cost structure and operating leverage. In fiscal 2007, we completed the transfer of production of laser power supplies from Auburn, California to a global electronics contract manufacturer. During fiscal 2008, we consolidated our Munich DPSS manufacturing into our Lübeck, Germany site. The transfer was completed in the fourth quarter of fiscal 2008. In the first quarter of fiscal 2009, we announced the consolidation of the remainder of our Munich facility (primarily Excimer laser manufacturing) into our Göttingen site. The transfer was completed in the third quarter of fiscal 2009. In fiscal 2009, we outsourced one of our laser product lines to a contract manufacturer located in Asia and outsourced our laser optics manufacturing to an optics manufacturer located in North America. The supply from these strategic contract manufacturers is covered by long term supply agreement contracts. During the second quarter of fiscal 2009, we announced the consolidation of our St. Louis, Missouri facility into our Santa Clara, California site. The transfer was completed in the fourth quarter of fiscal 2009. During the second quarter of fiscal 2009, we announced our plans to close our Tampere, Finland facility and establish manufacturing capabilities at our Sunnyvale, California site. The closing of our Finland facility is expected to be completed by the end of fiscal 2010.

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 and optically pumped semiconductor 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 and crystals, 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, 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—We depend on sole source or limited source suppliers, both internal and external, for some of our key components and materials, including exotic materials and crystals, in our products, which make us susceptible to supply shortages or price fluctuations that could adversely affect our business" in Item 1A, which is incorporated herein by reference.

Operations

Our products are manufactured at our sites in Santa Clara, California; Portland, Oregon; East Hanover, New Jersey; Bloomfield, Connecticut; Lübeck, Germany; Göttingen, Germany; Glasgow, Scotland; and Tampere, Finland. In addition, we also use contract manufacturers 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, 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 Portland, Oregon. We manufacture exotic crystals in East Hanover, New Jersey. Our CO₂ 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. Our excimer gas laser products are manufactured in Göttingen, Germany. We manufacture the fiber lasers and a portion of our DPSS lasers used in microelectronics and scientific research applications in Glasgow, Scotland. Our facility in Tampere, Finland grows the aluminum-free materials that are incorporated into our semiconductor lasers.

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, 2009, we held approximately 355 U.S. and foreign patents, which expire from 2010 through 2027 (depending on the payment of maintenance fees) and we have approximately 92 additional pending patent applications that have been filed. The issued patents cover various products in all of the major markets that we serve.

For a discussion of the importance to our business of, and the risks attendant to intellectual property rights, see "Risk Factors—Risks Associated with Our Industry, Our Business and Market Conditions" 'We may not be able to protect our proprietary technology which could adversely affect our competitive advantage' and 'We 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. 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 Item 1A, which is incorporated herein by reference.

COMPETITION

Competition in the various photonics markets in which we provide products is very intense. We compete against a number of companies including CVI Melles Griot, Cymer, Inc., GSI Group, Inc., which includes the former business of Excel Technology, Inc., IPG Photonics Corporation, JDS Uniphase Corporation, Newport Corporation, Rofin-Sinar Technologies, Inc., and Trumpf GmbH, as well as other smaller companies. 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 2009 year-end, our backlog of orders scheduled for shipment (generally within one year) was \$164.3 million compared to \$183.5 million at fiscal 2008 and \$188.4 million at fiscal 2007 year-ends. Orders used to compute backlog are generally cancelable without substantial penalties. Historically, the rate of cancellation experienced by us has not been significant.

SEASONALITY

We have historically experienced decreased bookings and 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 many of our customers due to year-end holidays. This historical pattern should not be considered a reliable indicator of the Company's future net sales or financial performance.

EMPLOYEES

As of fiscal 2009 year-end, we had 1,712 employees. Approximately 305 of our employees are involved in research and development; 926 of our employees are involved in operations, manufacturing, service and quality assurance; and 481 of our employees are involved in sales, marketing, finance, legal 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.

ACQUISITIONS

We consummated no acquisitions in fiscal 2009 or 2008.

In April 2007, we acquired Nuvonyx, a technology leader in high-power laser diode components, arrays, and industrial laser systems for materials processing and defense applications for approximately \$14.0 million in cash, net of acquisition costs of \$0.3 million. Nuvonyx produces high power arrays with powers in excess of 50 Kilowatts through its proprietary cooling and stacking technologies. The industrial laser systems are used for cladding and hardening of metals, joining materials, and other materials processing applications. Other near-term applications include welding of plastics and direct metal welding.

RESTRUCTURINGS AND CONSOLIDATION

During the second quarter of fiscal 2009, we announced our plans to close our facilities in Tampere, Finland and St. Louis, Missouri. The closure of our St. Louis, Missouri and Yokohama, Japan sites were completed in the fourth quarter of fiscal 2009. The closure of our Finland site is scheduled for completion by the end of fiscal 2010. These closure plans have resulted in charges primarily for employee termination and other exit related costs associated with a plan approved by management.

During fiscal 2008, we consolidated our German DPSS manufacturing into our Lübeck, Germany site. The transfer was completed in our fourth quarter of fiscal 2008. On October 13, 2008, we announced the consolidation of the remainder of our Munich facility into our Göttingen site. The transfer was completed in our third quarter of fiscal 2009. The consolidation and transfers have resulted in charges primarily for employee terminations, other exit related costs associated with a plan approved by management and a grant repayment liability.

On April 16, 2008, we announced that we entered into an agreement to sell certain assets of our Auburn Optics ("Auburn") manufacturing operation to Research Electro-Optics, Inc. ("REO"), a privately held optics manufacturing and technology company. We also entered into a strategic supply agreement with REO. REO is providing optical manufacturing capabilities for us, including fabrication and coating of optical components. The transition of the optics manufacturing assets from Auburn to REO was substantially completed in second quarter of fiscal 2009. The transition has resulted in charges primarily for employee terminations, supplier qualification, moving costs for related equipment, and other exit related costs associated with a plan approved by management.

There were no restructuring activities initiated during fiscal 2007.

GOVERNMENT REGULATION

Environmental regulation

Our operations are subject to various federal, state and local environmental protection regulations governing the use, storage, handling and disposal of hazardous 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 believe that compliance with federal, state and local environmental protection 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 may face potentially increasing complexity in our product designs and procurement operations as we adjust to requirements relating to the materials composition of our products that apply to specified electronics products put on the market in the European Union as of July 1, 2006 (Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive). We could face significant costs and liabilities in connection with product take-back legislation. The European Union has finalized the Waste Electrical and Electronic Equipment Directive, which make producers of electrical goods financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. Similar laws are now pending in various jurisdictions within the United States.

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

SEGMENT INFORMATION

We are organized into two operating segments: Commercial Lasers and Components ("CLC") and Specialty Lasers and Systems ("SLS"). This segmentation reflects the go-to-market strategies for various products and markets. While both segments work to deliver cost-effective photonics solutions, CLC focuses on higher volume products that are offered in set configurations. The product architectures are designed for easy exchange at the point of use such that product service and repairs are based upon advanced replacement and depot (i.e., factory) repair. CLC's primary markets include OEM components and instrumentation and materials processing. SLS develops and manufacturers configurable, advanced-performance products largely serving the microelectronics and scientific research markets. The size and complexity of many of the SLS products require service to be performed at the customer site by factory-trained field service engineers.

Effective as of the beginning of the first quarter of fiscal 2009, in order to align all of our diode-pumped solid state ("DPSS") technology into the same reportable operating segment, management moved the DPSS Germany and Crystal product families from the CLC segment into the SLS segment. This allows for leverage and efficiencies in many parts of the business. Crystal is primarily an internal supplier that supports the DPSS product family. This concentrates all DPSS product families in the SLS segment effective as of the first quarter of fiscal 2009. All reporting has been aligned to reflect the revised reportable operating segments (CLC and SLS) and prior periods have been restated.

We have identified CLC and SLS as operating segments for which discrete financial information was available. Both units have engineering, marketing, product business management and product line management. 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.

FINANCIAL INFORMATION ABOUT FOREIGN AND DOMESTIC OPERATIONS AND EXPORT SALES

Financial information relating to foreign and domestic operations for fiscal years 2009, 2008 and 2007, is set forth in Note 18, "Segment and Geographic Information" of our Notes to Consolidated Financial Statements.

ITEM 1A. RISK FACTORS

BUSINESS ENVIRONMENT AND INDUSTRY TRENDS

Risks Associated with Our Industry, Our Business and Market Conditions

Our operating results, including net sales, net income (loss) and adjusted EBITDA percentage, and our stock price have varied in the past, and our future operating results will continue to be subject to quarterly and annual fluctuations based upon numerous factors, including those listed in this section and throughout this report. Our stock price will continue to be subject to daily variations as well. In addition, our future operating results and stock price may not follow any past trends or meet our guidance and expectations.

Our net sales and operating results, such as adjusted EBITDA percentage, net income/loss and costs, and our stock price has 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;
- access to applicable credit markets by us, our customers and their end customers;
- fluctuations in demand for, and sales of, our products or prolonged downturns in the industries that we serve, including as a result of the current challenging macroeconomic climate;
- 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 and quality desired and at the prices we have budgeted;
- timing or cancellation of customer orders and shipment scheduling;
- fluctuations in our product mix;
- foreign currency fluctuations;

- commodity pricing;
- introductions of new products and product enhancements by our competitors, entry of new competitors into our markets, pricing pressures and other competitive factors;
- our ability to develop, introduce, manufacture and ship new and enhanced products in a timely manner without defects;
- our increased reliance on contract manufacturing;
- delay of achievement of our footprint consolidation effort;
- the rate of market acceptance of our new products;
- the ability of our customers to pay for our products;
- seasonal sales trends;
- 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;
- costs related to acquisitions of technology or businesses;
- · impairment of goodwill and intangible assets;
- our ability to meet our expectations and forecasts and those of public market analysts and investors;
- costs and expenses from litigation;
- the availability of funding by the United States government for research funding with regards to our customers in the scientific business, such as universities;
- continued spending by the United States government on defense-related projects where we are a subcontractor;
- flow of Trouble Asset Relief Program ("TARP") funds from the United States government funding purchases by our customers;
- maintenance of supply relating to products sold to the government on terms which we would prefer not to accept; and
- distraction of management related to acquisition or divestment activities.

In addition, we often recognize a substantial portion of our sales in the last month of the quarter. 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, the stock market has experienced extreme price and volume fluctuations that have affected the stock prices of many technology companies. There has not always been a direct correlation between this volatility and the performance of particular companies subject to these stock price fluctuations. Further, over the last twelve months, equity markets around the world have significantly fluctuated across most sectors. 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 are exposed to risks associated with worldwide economic conditions and related uncertainties.

Volatility and disruption in the credit markets, depressed consumer confidence, 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. Additionally, given the breadth of our product offering, our ability to maintain or increase our research and development investments may be adversely impacted in the event our sales continue to be suppressed and do not increase in the future. Spending and the timing thereof by consumers and businesses has a significant impact on our results and, where such spending is delayed or canceled, it could cause a material negative impact on our operating results. We do not know how long the current challenging economic conditions will last. Continued or increased weakness in our end markets could negatively impact our revenue, gross margin and operating expenses, and consequently have a material adverse effect on our business, financial condition and results of operations.

The current financial turmoil affecting the banking system and financial markets and the possibility that additional financial institutions may consolidate or go out of business have resulted in a tightening in the credit markets, and a low level of liquidity in many financial markets. There could be a number of follow-on effects from the credit crisis 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 operations. 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. The current volatility in the financial markets and 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 current global economic conditions could also continue to increase the volatility of our stock price.

In addition, political and social turmoil related to international conflicts and terrorist acts may put further pressure on economic conditions in the United States and abroad. 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, thus fostering an atmosphere of greater potential exposure for inappropriate business conduct. See "Part I, Item 4. CONTROLS AND PROCEDURES—Inherent Limitations over Internal Control."

Our cash and cash equivalents and short-term investments are managed through various banks around the world and the current capital and credit market conditions are extremely volatile, putting pressure on the ability of banks to provide service in the same manner as they have in the past and in some cases, causing financial institutions to fail, both of which would likely have an adverse affect on our ability to timely access funds.

The capital and credit markets have been experiencing extreme volatility and disruption. In recent months, the volatility and disruption have reached unprecedented levels. 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 a 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 such funds, we may need to increase our 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.

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. Additionally, our overall investment portfolio

is often concentrated in the financial sector, which has been negatively impacted by the recent market liquidity conditions. Credit ratings and pricing of these investments can be negatively impacted by liquidity, credit deterioration or losses, financial results, or other factors. As a result, the value or liquidity of our cash, cash equivalents and short-term investments could decline and result in a material impairment, which could have a material adverse effect on our financial condition and operating results. See "Item 7A. Quantitative and Qualitative Disclosures about Market Risk."

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 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. We recorded a material charge during the first quarter of fiscal 2009 related to the impairment of goodwill in our CLC operating segment. A further 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 additional impairment charge. Any such additional material charges, whether related to goodwill or purchased intangible assets, may have a material negative impact on our financial condition and operating results.

We depend on sole source or limited source suppliers, both internal and external, for some of our key components and materials, including exotic materials and crystals, in our products, which make us susceptible to supply shortages or price fluctuations that could adversely affect our business.

We currently purchase several key components and materials used in the manufacture of our products from sole source or limited source suppliers, both internal and external. Some of these suppliers are relatively small private companies that may discontinue their operations at any time and which may be particularly susceptible to the current economic conditions. 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. We may fail to obtain these supplies in a timely manner in the future. We may experience difficulty identifying alternative sources of supply for certain components used in our products. We would experience further delays while identifying, evaluating and testing the products of these potential alternative suppliers. Furthermore, financial or other difficulties faced by these suppliers or significant changes in demand for these components or materials could limit their availability. Additionally, we are in the process of managing multiple projects moving certain suppliers internally to different 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. 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.

We have historically relied exclusively on our own production capability to manufacture certain strategic components, optics and optical systems (which has recently been outsourced to a third party), crystals, semiconductor lasers, lasers and laser-based systems. 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. 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.

Our future success depends on our ability to increase our sales volumes and decrease our costs to offset anticipated declines in the average selling prices ("ASPs") 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 therefore, 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. 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 historically been the photonics industry's high quality supplier of laser systems. We have in the past, experienced decreases in the ASPs of some of our products. We anticipate that as competing products become more widely available, the ASPs of our products may decrease. If we are unable to offset the anticipated 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.

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 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.

During fiscal years 2009, 2008 and 2007, our research and development expenses have been in the range of 12% to 14% of net sales. 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.

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

For fiscal 2009, 66% of our net sales were derived from customers outside of the United States. For fiscal years 2008 and 2007, 68% of our net sales were derived from customers outside of the United States. We anticipate that foreign sales will continue to account for a significant portion of our revenues in the foreseeable future. A global economic slowdown could have a negative effect on various foreign markets in which we operate. 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. The majority of our foreign sales occur through our foreign sales subsidiaries and the remainder of our foreign sales result from exports to foreign distributors, resellers and customers. Our foreign operations and sales are subject to a number of risks, including:

- longer accounts receivable collection periods;
- the impact of recessions and other economic conditions in economies outside the United States;
- unexpected changes in regulatory requirements;
- · certification requirements;
- environmental regulations;
- reduced protection for intellectual property rights in some countries;
- potentially adverse tax consequences;
- political and economic instability;
- import/export regulations, tariffs and trade barriers;
- · cultural and management differences; and
- preference for locally produced products.

Our business could also be impacted by international conflicts, terrorist and military activity, civil unrest and pandemic illness which could cause a slowdown in customer orders or cause customer order cancellations.

We are also subject to the risks of fluctuating foreign 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 foreign subsidiaries. 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 may not be able to protect our proprietary technology which could adversely affect our competitive advantage.

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. We cannot assure you that our patent applications will be approved, that any patents that may be issued will protect our intellectual property or that any issued patents will not 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 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. 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 involving patents and other intellectual property rights. This has also been seen in our industry as well, for example in the litigation brought by IMRA America, Inc. against IPG Photonics Corporation. 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. 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 for which we do not have insurance and our business may be seriously harmed. We do not have insurance to cover potential claims of this type.

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. While we typically maintain customary levels of 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.

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, 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. Our failure to attract additional employees and retain our existing employees 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, any of whom may leave, which could harm our business and our results of operations.

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

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 customer's 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 revenue 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 CVI Melles Griot, Cymer, Inc., GSI Group, Inc., which includes the former business of Excel Technology, Inc., IPG Photonics Corporation, JDS Uniphase Corporation, Newport Corporation, Rofin-Sinar Technologies, Inc., 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 competitors 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 market and we are likely to compete with new companies in the future. We may 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. 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, such as the microelectronics market, competition is particularly intense.

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 revenues.

Laser systems are inherently complex in design and require ongoing regular maintenance. The manufacture of our lasers, laser products and systems involves a highly complex and precise process. As a result of the technological complexity of our products, 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 certain 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 failure 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. 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 under 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;
- increased costs of product returns and warranty expenses;
- damage to our brand reputation;
- failure to attract new customers or achieve market acceptance;
- diversion of development and engineering resources; 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.

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 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, 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. Any of these occurrences would negatively impact our net sales, business or operating results.

Our increased reliance on contract manufacturing and other 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 subassemblies and less complex turnkey products, including some performed at international sites located in Asia and Eastern Europe. Additionally, we have outsourced the manufacture of certain of our optics components to a third party. 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 impact of current worldwide economic conditions, 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 footprint consolidation effort, our business could be disrupted, which could harm our operating results.

We have previously announced our intent to reduce our global operating footprint, including the closing of our Auburn, California (substantially completed in the second quarter of fiscal 2009), Munich, Germany (completed in the third fiscal quarter of 2009), St. Louis, Missouri, San Jose, California and Yokohama, Japan (completed in the fourth quarter of fiscal 2009), and Tampere, Finland operations (which we anticipate to complete in the fourth quarter of fiscal 2010). If we are not able to effectively transition the business activities from one site to another (such as moving our Tampere, Finland operations to our Sunnyvale, California facility as well as managing the need to increase our safety stock of materials during such transition) it could have an adverse impact on our results of operations.

If we fail to manage our growth or, alternatively, our spending during downturns, effectively, our business could be disrupted, which could 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. The growth in sales, combined with the challenges of managing geographically-dispersed operations, has placed 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.

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 strategic acquisitions of other corporations and entities, 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 amortization.

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;
- writing off goodwill or other intangible assets;
- 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 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.

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 Tampere, Finland or our Sunnyvale, California sites 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, 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. 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.

If our facilities or those of our suppliers and contract manufacturers were to experience catastrophic loss, our operations would be seriously harmed.

Our facilities and those of our suppliers and contract manufacturers could be subject to a catastrophic loss from fire, flood, earthquake, work stoppages, acts of war, pandemic illnesses, 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 at any of our facilities could disrupt our operations, delay production, shipments and revenue 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.

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

Provisions of our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition 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 acquirors or result in a lower stock price.

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 worldwide tax liabilities. Our future tax rates could be affected by changes in the composition of earnings in countries or states with differing tax rates, changes in the valuation of our deferred tax assets and liabilities, or changes in the tax laws. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service ("IRS") and other tax authorities. From time to time the United States, foreign and state governments make substantive changes to tax rules and the application of rules to companies, including the recent announcement from the United States government potentially impacting our ability to defer taxes on international earnings. 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 than the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition.

We could incur tax liabilities under Section 409A of the Internal Revenue Code and other tax penalties.

As a result of our investigation into our historical stock option granting practices, we have determined that a number of our outstanding stock option awards were granted at exercise prices below the fair market value of our stock on the appropriate accounting measurement date. The primary adverse tax consequence is that the re-measured options vesting after December 31, 2004, or options that are materially modified after October 3, 2004, are potentially subject to option holder excise tax under Section 409A of the Internal Revenue Code (and, as applicable, similar excise taxes under state law or foreign law). Option holders who hold options which are determined to have been granted with exercise prices below the fair market value of the underlying shares of common stock on the appropriate measurement date would be subject to taxes, penalties and interest under Section 409A if no action is taken to cure the options from exposure under Section 409A before December 31, 2008. We took action in fiscal year 2008 to cure certain options from exposure under Section 409A. However, there can be no assurance that such action cured all potential circumstances in which Section 409A would apply. Should it be found that excise taxes under Section 409A apply to option holders subsequent to our ability to cure the options from exposure to Section 409A, and we decide to reimburse option holders for such taxes, our results of operations may be materially adversely affected.

Also as a result of our investigation into our historical stock option granting practices, we have determined that certain payroll taxes, interest and penalties apply under various sections of the Internal Revenue Code, various state tax statutes, and tax statutes in various foreign jurisdictions. We have reviewed these liabilities and paid them. There can be no assurance that our payments covered all potential circumstances in which additional payroll taxes, interest and penalties would apply. Should it be found that additional payroll taxes, interest and penalties would apply, our results of operations may be materially adversely affected.

Compliance with changing regulation of corporate governance and public disclosure may create uncertainty regarding compliance matters.

Federal securities laws, rules and regulations, as well as the rules and regulations of self-regulatory organizations such as Nasdaq and the NYSE, require companies to maintain extensive corporate governance measures, impose comprehensive reporting and disclosure requirements, set strict independence and financial expertise standards for audit and other committee members and impose civil and criminal penalties for companies and their chief executive officers, chief financial officers and directors for securities law violations. These laws, rules and regulations have increased and will continue to increase the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management's attention from business operations. Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters. New or changed laws, regulations and standards are subject to varying interpretations in many cases. As a result, their application in practice may evolve over time. We are committed

to maintaining high standards of ethics, corporate governance and public disclosure. Complying with evolving interpretations of new or changed legal requirements may cause us to incur higher costs as we revise current practices, policies and procedures, and may divert management time and attention from revenue generating to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, our reputation may also be harmed.

Governmental regulations affecting the import or export of products could negatively affect our revenues.

The United States and various foreign governments have imposed tariffs, controls, export license requirements and restrictions on the import or export of some technologies, especially encryption technology. In addition, from time to time, governmental 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 approval for our products, could harm our international and domestic sales and adversely affect our revenues.

We may experience difficulties with our enterprise resource planning ("ERP") system and other IT systems. System failure or malfunctioning may result in disruption of operations and the inability to process transactions, and this could adversely affect our ability to timely or accurately provide our financial results.

System failure or malfunctioning could disrupt our ability to timely and accurately process and report key components of our results of operations, financial position and cash flows. Any disruptions or difficulties that may occur in connection with our ERP system or other systems could also adversely affect our ability to complete important business processes such as the evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. If we encounter unforeseen problems with regard to our ERP system or other systems, our business and resulting financial reporting could be adversely affected.

If our security measures are breached and unauthorized access is obtained to a customer's data or our data, our service may be perceived as not being secure, customers may curtail or stop using our service and we may incur significant legal and financial exposure and liabilities.

Our operations include the storage of customers' proprietary information, and security breaches could expose us to a risk of loss of this information, litigation and possible liability. If our security measures are breached as a result of third-party action, employee error, malfeasance or otherwise, and, as a result, someone obtains unauthorized access to our data or our customers' data, our reputation could be damaged, our business may suffer and we could incur significant liability. 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 data or our customers' data, which could result in significant legal and financial exposure and a loss of confidence in the security of our service that would harm our future business prospects. 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. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose sales and customers.

We employ technology licensed from third parties for use in or with our solutions, and the loss or inability to maintain these licenses or errors in the software we license could result in increased costs, or reduced service levels, which would adversely affect our business.

Our hosted solutions incorporate certain technology obtained under licenses from other companies, such as Salesforce. com and Oracle. We anticipate that we will continue to license technology and development tools from third parties in the future. Although we believe that there are commercially reasonable software alternatives to the third-party software we currently license, this may not always be the case, or we may license third-party software that is more difficult or costly to replace than the third party software we currently license. In addition, integration of our products with new third-party software may require significant work and require substantial allocation of our time and resources. Also, to the extent that our products depend upon the successful operation of third-party products in conjunction with our products, any undetected errors in these third-party products could prevent the implementation or impair the functionality of our products, delay new product introductions and injure our reputation. Our use of additional or alternative third-party software would require us to enter into license agreements with third parties, which could result in higher costs.

Our market is unpredictable and characterized by rapid technological changes and evolving standards, 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 revenues 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.

For our fiscal years 2009, 2008 and 2007, our research and development costs were \$61.4 million (14.1% of net sales), \$74.3 million (12.4% of net sales) and \$74.6 million (12.4% of net sales), respectively. 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.

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

Our net sales depend in part on the demand for our products by semiconductor equipment companies. The semiconductor market has 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, and we may not be able to respond effectively to these cycles. The continuing uncertainty in this market severely limits our ability to predict our business prospects or financial results in this market.

During industry downturns, our revenues from this market 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 this market, 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 this market 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.

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, 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. 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.

Failure to maintain effective internal controls may cause a loss of investor confidence in the reliability of our financial statements or to 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 the Company's 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 review 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Santa Clara, California. At fiscal 2009 year end, our primary locations were as follows (all 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 foot building	Corporate headquarters, manufacturing, R&D	Owned
Santa Clara, CA(3)	90,120 square foot building	Office	Leased through April 2015
Sunnyvale, CA(1)(3)	24,000 square foot building	Office, manufacturing, R&D	Leased through December 2018
Bloomfield, CT(1)	60,505 square foot building	Office, manufacturing, R&D	Lease expiring in April 2013
East Hanover, NJ(2)	30,000 square foot building	Office, manufacturing, R&D	Leased through October 2011
Portland, OR(1)	41,250 square foot building	Office, manufacturing, R&D	Leased through December 2018
Tampere, Finland(1)(3)	5 acres of land, 40,970 square foot building	Office, manufacturing, R&D	Owned
Dieburg, Germany	31,306 square foot building	Office	Leased through December 2012
Göttingen, Germany(2)	7.6 acres of land, several buildings totaling 119,500 square feet	Office, manufacturing, R&D	Owned
Lübeck, Germany(2)	38,815 square foot building	Office, manufacturing, R&D	Leased through December 2010
Lübeck, Germany(2)	31,115 square foot building	Office, manufacturing, R&D	Leased through December 2011 with option to purchase building
Tokyo, Japan	17,602 square foot building	Office	Leased through April 2011
Yokohama, Japan(4)	5,813 square-foot building	Office	Leased through October 2010
Glasgow, Scotland(2)	2 acres of land, 30,000 square foot building	Office, manufacturing, R&D	Owned

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

- (3) Portions of this property are not fully utilized.
- (4) Coherent has vacated this building.

We maintain other sales and service offices under varying leases expiring from 2010 through 2018 in the United States, Japan, Korea, China, Germany, France, Italy, the United Kingdom and the Netherlands.

We consider our facilities to be both suitable and adequate to provide for current and near term requirements.

ITEM 3. LEGAL PROCEEDINGS

We are subject to legal claims and litigation arising in the ordinary course of business, such as product liability, employment or intellectual property claims, including, but not limited to, the matters described below. The outcome of any such matters is currently not determinable. Although we do not expect that such legal claims and litigation will ultimately have a material adverse effect on our consolidated financial position or results of operations, an adverse result in one or more matters could negatively affect our results in the period in which they occur.

⁽²⁾ This facility is utilized primarily by our SLS operating segment.

Derivative Lawsuits

Between February 15, 2007 and March 2, 2007, three purported shareholder derivative lawsuits were filed in the United States District Court for the Northern District of California against certain of the Company's current and former officers and directors. The Company is named as a nominal defendant. The complaints generally allege that the defendants breached their fiduciary duties and violated the securities laws in connection with the granting of stock options, the accounting treatment for such grants, the issuance of allegedly misleading public statements and stock sales by certain of the individual defendants. On May 30, 2007, these lawsuits were consolidated under the caption In re Coherent, Inc. Shareholder Derivative Litigation, Lead Case No. C-07-0955-JF (N.D. Cal.). On June 25, 2007, plaintiffs filed an amended consolidated complaint. The consolidated complaint asserts causes of action for alleged violations of federal securities laws, violations of California securities laws, breaches of fiduciary duty and/or aiding and abetting breaches of fiduciary duty, abuse of control, gross mismanagement, constructive fraud, corporate waste, unjust enrichment, insider selling and misappropriation of information. The consolidated complaint seeks, among other relief, disgorgement and damages in an unspecified amount, an accounting, rescission of allegedly improper stock option grants, punitive damages and attorneys' fees and costs.

The Company's Board of Directors appointed a Special Litigation Committee ("SLC") comprised of independent director Sandeep Vij to investigate and evaluate the claims asserted in the derivative litigation and to determine what action(s) should be taken with respect to the derivative litigation. On September 8, 2009, Coherent, Inc., by and through the SLC, plaintiffs, and certain of Coherent's former and current officers and directors filed with the court a Stipulation of Settlement reflecting the terms of a settlement that would resolve all claims alleged in the consolidated complaint. The terms of the settlement include a financial benefit to Coherent of over \$6 million, which is comprised of a cash payment of \$5.25 million to the Company and the waiver by certain former officers and directors of potential claims relating to expired stock options valued at \$762,305. The settlement terms also include the implementation and/or agreement to maintain certain corporate governance changes, and a payment by the Company to plaintiffs' counsel of \$3 million in attorneys' fees and expenses. Following the payment of the attorneys' fees and expenses, the Company will receive a net cash benefit of \$2.25 million from the settlement.

On September 14, 2009, the United States District Court for the Northern District of California issued an order granting preliminary approval of the settlement. On November 20, 2009, the court held a hearing for final approval of the settlement, and on November 24, 2009, the court entered an Order and Final Judgment, which approved the settlement and dismissed the action with prejudice. Coherent received the cash payment of \$2.25 million on December 11, 2009.

Income Tax Audits

The IRS is conducting an audit of our 2003 and 2004 tax returns. The IRS has issued a number of Notices of Proposed Adjustments ("NOPAs") to these returns. Among other items, the IRS has challenged our research and development credits and our extraterritorial income ("ETI") exclusion. We have agreed to the various adjustments proposed by the IRS and we believe that we have adequately provided for these exposures and any other items identified by the IRS as a result of the audit of these tax years. As part of its audit of our 2003 and 2004 tax years, the IRS has requested information related to our stock option investigation and we complied with this request and we will address any other issues that are raised in a timely manner. The IRS has also indicated that it may consider an audit of our 2005 and 2006 tax returns.

The IRS is also auditing the research and development credits generated in the years 1999 through 2001 and carried forward to future tax years. We received a NOPA from the IRS in October 2008 to decrease the amount of research and development credits generated in years 2000 and 2001. We responded to this NOPA and we are disputing the adjustment with the IRS through the appeals process available to us. While we believe that we have adequately provided for any adjustments related to these credits that may be determined under the IRS appeals process, there exists the possibility of a material adverse impact on our results of operations in the event that this issue is resolved unfavorably to us.

The German tax authorities are conducting an audit of our subsidiary in Göttingen and its affiliates for the tax years 1999 through 2005. We believe that we have adequately provided for any adjustments that may be proposed by the German tax authorities.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

PART II

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

Our common stock is quoted on the NASDAQ Global Market under the symbol "COHR." Our common stock was de-listed on December 19, 2007 and traded on the over-the-counter market on the Pink Sheets under the symbol "COHR.PK." until it was re-listed on the Nasdaq Global Select Market on February 14, 2008. The following table sets forth the high and low sales prices for each quarterly period during the past two fiscal years as reported on the Nasdaq Global Select Market, its predecessor, the Nasdaq National Market or the over-the-counter market.

	Fiscal					
	2009		200	18		
	High	Low	High	Low		
First quarter	\$35.55	\$20.66	\$33.38	\$24.61		
Second quarter	\$22.30	\$14.51	\$29.05	\$22.10		
Third quarter	\$21.22	\$16.83	\$34.15	\$27.36		
Fourth quarter	\$25.51	\$18.89	\$38.50	\$29.08		

The number of stockholders of record as of December 1, 2009 was 1,195. No cash dividends have been declared or paid since Coherent was founded and we have no present intention to declare or pay cash dividends.

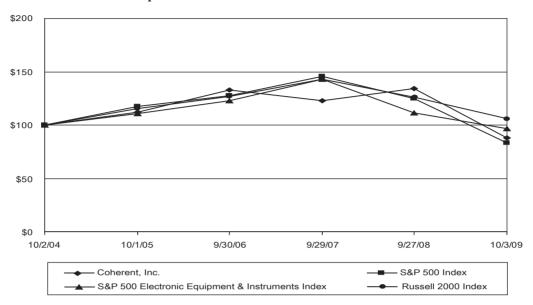
In February 2008, the Board of Directors authorized the Company to repurchase up to \$225 million of its common stock through a modified "Dutch Auction" tender offer and an additional \$25 million of its common stock, following the completion or termination of the tender offer, under its stock repurchase program, terminating no later than February 11, 2009. On March 17, 2008, we completed our tender offer, repurchased and retired 7,972,313 shares of outstanding common stock for a total of \$228.2 million. The repurchases were accounted for as a reduction in additional paid in capital.

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 1, 2005 through October 3, 2009 comparing the return on our common stock with the Standard & Poors 500 Stock Index, the Standard and Poors Electronic Equipment and Instruments Index and the Russell 2000 Index. No dividends have been declared or paid on our common stock during such period. 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 S&P 500 INDEX, THE S&P 500 ELECTRONICS EQUIPMENT& INSTRUMENTS INDEX AND THE RUSSELL 2000 INDEX

Comparison of Cumulative Five Year Total Return



	Base		RNS			
	Period	Years Ending				
Company Name / Index	10/2/04	10/1/05	9/30/06	9/29/07	9/27/08	10/3/09
Coherent, Inc.	100	112.31	132.95	123.05	134.22	88.11
S&P 500 Index	100	110.57	122.51	142.64	111.31	96.63
S&P 500 Electronic Equipment & Instruments Index	100	117.34	127.38	145.92	124.89	83.46
Russell 2000 Index	100	115.51	126.97	142.64	126.50	105.94

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.

We derived the selected consolidated financial data as of fiscal 2009 and 2008 year-end and for fiscal 2009, 2008 and 2007 from our audited consolidated financial statements, and accompanying notes, contained in this annual report. The consolidated statements of operations data for fiscal 2006 and 2005 and the consolidated balance sheet data as of fiscal 2007, 2006 and 2005 year-end are derived from our consolidated financial statements which are not included in this report.

Consolidated financial data	Fiscal 2009(1)	Fiscal 2008(2)	Fiscal 2007(3)	Fiscal 2006(4)	Fiscal 2005(5)
Net sales	\$435,882	\$599,262	\$601,153	\$584,652	\$516,252
Gross profit	\$161,110	\$251,906	\$250,008	\$256,113	\$217,693
Net income (loss)	\$(35,319)	\$23,403	\$15,951	\$45,394	\$38,414
Net income (loss) per share(6):					
Basic	\$(1.45)	\$0.85	\$0.51	\$1.47	\$1.25
Diluted	\$(1.45)	\$0.83	\$0.50	\$1.44	\$1.23
Shares used in computation(6):					
Basic	24,281	27,505	31,398	30,973	30,756
Diluted	24,281	28,054	32,024	31,567	31,224
Total assets	\$753,604	\$806,383	\$947,600	\$1,082,524	\$800,830
Long-term obligations	\$6	\$15	\$21	\$201,023	\$
Other long-term liabilities	\$91,685	\$94,606	\$47,848	\$37,419	\$48,734
Stockholders' equity	\$575,571	\$598,435	\$770,986	\$717,504	\$639,670

- Includes \$19.3 million in after-tax expense related to the impairment of goodwill, restructuring expenses of \$11.5 million after tax primarily related to the consolidation of our Munich site into our Gottingen and Lubeck, Germany sites and our Finland site, the exit of our Auburn, California facility, the exit of our St. Louis, Missouri facility and headcount reductions due to the evolving global economic conditions, \$0.8 million in after-tax costs related to our stock option investigation and litigation and a tax charge of \$3.8 million composed of the impact of a recently enacted change in state tax law and a valuation allowance in one of our European subsidiaries.
- (2) Includes \$5.5 million in after-tax costs related to our stock option investigation and litigation, restructuring expenses of \$3.9 million after-tax related to the exit of our Auburn, California facility, the consolidation of our German DPSS manufacturing into one location in Germany and headcount reductions due to the evolving global economic situation, and a tax charge of \$1.4 million in connection with a dividend from one of our European subsidiaries.
- (3) Includes a \$12.6 million loss on our sale of our Auburn campus in Auburn, California, \$7.0 million in after-tax costs related to our stock option investigation and litigation, a \$2.6 million after-tax charge to write off unamortized capitalized deferred issuance costs associated with our repayment of our convertible subordinated notes, a charge of \$2.2 million for in-process research and development ("IPR&D") related to our purchase of Nuvonyx, \$0.2 million after-tax costs related to the termination of the Excel merger agreement, a \$3.6 million capital gain on the sale of our Condensa building in Santa Clara, California, and a \$0.7 million after-tax gain from the sale of substantially all of the net assets of our Coherent Imaging Optics Limited (CIOL) subsidiary to CVI Laser.
- Includes a \$11.7 million tax benefit primarily resulting from the consolidation of two wholly owned Japanese entities in which the income of one of the Japanese subsidiaries and a portion of the income of its German parent that were previously treated as permanently reinvested were deemed distributed to the U.S. and the income and the associated tax credits were reported for U.S. tax purposes, a \$3.5 million after-tax charge for acquisition related costs from the terminated merger agreement with Excel, an additional \$1.5 million after tax in purchase price and related legal and other fees associated with the acquisition of the remaining interest of our Lambda Physik subsidiary, \$0.6 million after-tax Excel pre-merger integration related costs, a facility closure charge of \$0.4 million after tax and an after tax IPR&D charge of \$0.4 million associated with the purchase of the assets of Iolon in the first quarter of fiscal 2006.

- Includes a \$4.1 million after-tax charge related to excess inventories as a result of the accelerated decommissioning of lithography lasers in Lambda Physik, a \$2.7 million (net of minority interest of \$0.1 million) after-tax charge associated with our decision to discontinue future product development and investments in the semiconductor lithography market within our Lambda Physik operations and a charge of \$1.6 million for IPR&D related to our purchase of TuiLaser. Fiscal 2005 also includes tax benefits of \$1.4 million for increased use of export tax incentives and research and development ("R&D") tax credits, \$9.6 million for the reversal of a deferred tax valuation allowance related to our Lambda Physik operations and \$0.5 million related to federal tax law changes enacted during fiscal 2005.
- (6) See Note 2, "Significant Accounting Policies" in our Notes to Consolidated Financial Statements for an explanation of the determination of the number of shares used in computing net income (loss) per share.

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 in Item 8, "Financial Statements and Supplementary Data" in 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 "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."

KEY PERFORMANCE INDICATORS

The following is a summary of some of the quantitative performance indicators (as defined below) used to assess our results of operations and financial condition:

	2009	2008	2007
	(Dol	lars in thousand	ls)
Bookings	\$419,239	\$594,049	\$591,039
Net Sales—Commercial Lasers and Components	\$125,619	\$198,748	\$208,868
Net Sales—Specialty Lasers and Systems	\$310,163	\$400,414	\$390,616
Gross Profit as a Percentage of Net Sales—Commercial Lasers and Components	26.4%	39.8%	42.1%
Gross Profit as a Percentage of Net Sales—Specialty Lasers and Systems	41.4%	43.7%	41.8%
Research and Development Expenses as a Percentage of Net Sales	14.1%	12.4%	12.4%
Income (Loss) Before Income Taxes	\$(35,855)	\$37,287	\$28,923
Net Cash Provided by Operating Activities	\$39,049	\$68,362	\$66,619
Days Sales Outstanding in Receivables	61.3	58.0	61.3
Days Sales Outstanding in Inventories	80.7	72.4	67.6
Capital Spending as a Percentage of Net Sales	5.0%	3.8%	3.6%

Definitions and analysis of these performance indicators are as follows:

Bookings

Bookings represent orders expected to be shipped within 12 months and services to be provided pursuant to service contracts. While we generally have not experienced a significant rate of cancellation, bookings are generally cancelable by our customers without substantial penalty and, therefore, we cannot assure all bookings will be converted to net sales.

Fiscal 2009 bookings decreased 29.4% from fiscal 2008. Decreases in fiscal 2009 bookings, compared to fiscal 2008, in the microelectronics, OEM components and materials processing markets were partially offset by increases in the scientific and government programs market. Fiscal 2008 bookings increased 0.5% from fiscal 2007. Increases in fiscal 2008 bookings; compared to fiscal 2007, in the microelectronics and scientific and government programs markets were partially offset by decreases in the OEM components and material processing markets.

Fiscal 2009 began with a significant decrease in bookings in all markets compared to the beginning of fiscal 2008, particularly in the microelectronics and OEM components and instrumentation markets that were most impacted by the decline in consumer confidence and spending. In the second quarter of fiscal 2009, the business environment remained challenging, with continued declines in bookings due to drops in consumer confidence in the microelectronics and OEM components and instrumentation markets as many companies, including us, were closely managing inventory levels and expenses. Although bookings in the scientific and materials processing markets decreased in the first quarter of fiscal 2009 from the levels of the fourth quarter of fiscal 2008, they began to show some signs of stability in the second quarter of fiscal 2009. The third quarter of fiscal 2009 continued to be impacted by macroeconomic conditions, with the largest impact felt in the microelectronics market. All four of our markets showed signs of recovery, with increases in bookings during the fourth quarter of fiscal 2009, led by significant increases in the microelectronics and scientific markets.

As a result of the macroeconomic conditions in fiscal 2009, three of our markets experienced significant declines in bookings for the full fiscal year when compared to fiscal 2008: microelectronics (43%), materials processing (38%) and OEM components and instrumentation (35%). Scientific bookings increased 6% from fiscal 2008 to fiscal 2009.

Microelectronics

In the fourth quarter of fiscal 2009, the market strengthened with a surge in orders from increased service demand to support higher fab utilization rates, selective capacity expansion tied to consumer demand and continued design wins for next generation devices. Given our broad coverage in this market, it is our observation that tier one tool vendors are recovering more rapidly than tier two or three players. While not a surprising development, it makes it uncertain as to what the customer landscape will look like in twelve to eighteen months. With factory utilization rates continuing to rise at semiconductor fabs, service orders have picked up as predicted and are trending towards historical norms. Bookings to support new tool builds have also improved and we remain optimistic about the mid- to long-term future orders.

The advanced packaging market also experienced a rebound in service orders in the fourth quarter of fiscal 2009, following several down quarters. There are signs that the microvia market is working through its inventory overhang. This will be aided by the introduction of new tools by our customers that reduce feature size, improve quality and increase throughput. We expect these tools to start shipping in the first half of calendar 2010. The longer-term catalyst for this submarket is 4th generation network deployment, which requires approximately twice as many microvias per board compared to 3rd generation networks.

Orders from the flat panel display market in the fourth quarter of fiscal 2009 increased significantly due to considerable OLED capacity expansion at a leading manufacturer, continued wins in mobile touch screen manufacturing and service. The multisystem order for excimer laser annealing systems was valued at approximately \$10 million.

Trends for crystalline silicon devices in the solar market are similar to the third quarter of fiscal 2009. There is an ongoing cost-based, share shift from European vendors to vendors in Asia and a continued interest in enhancing cell conversion efficiency. To address both, we have expanded our offering of solar tools to include volume production units as well as development and pilot production tools. The new EquinoxTM systems were introduced in September at the European solar show in Hamburg. We are currently working on a number of deployment opportunities.

OEM Components and Instrumentation

In the fourth quarter of fiscal 2009, the market strengthened, particularly in the medical OEM applications. Several key customers for excimer lasers used in refractive surgery placed annual orders, which we believe indicates they have worked through their inventory and have confidence that their end market is recovering.

The instrumentation market also saw an increase in demand especially in flow cytometry and confocal microscopy. There is a growing belief within this market that stimulus funds from the National Institutes of Health impacted some of the order growth in the fourth quarter of fiscal 2009.

The defense market remains active and we have been working to better align ourselves with certain prime contractors. As a result, we are becoming qualified on a number of programs, mostly for designators and countermeasures, requiring semiconductor lasers. Our recent acquisition of businesses from StockerYale in the first quarter of fiscal 2010 (see Note 19 "Subsequent Events" in the Notes to Consolidated Financial Statements) will also contribute to these efforts.

We have continued to experience considerable success over the past couple of years in the light show market with our TaipinTM OPSLTM lasers. These lasers enable a compact, electrically efficient platform that is easy to transport and set-up. To date, we have delivered about 500 lasers to integrators. They are being used for full color, high-end displays in a variety of venues including concerts and conferences.

Materials Processing

Fourth quarter fiscal 2009 orders improved from the third quarter of fiscal 2009 with modest demand improvement from lower power applications for marking, engraving and textile manufacturing. Customers are citing inventory replenishment, service needs and new system builds as driving order volumes. The low power end of the market (defined as less than 100W of laser output power) may have stabilized and possibly reached a turning point. By contrast, higher power applications remain sluggish due to excess capacity and challenging cash flows.

New order activity in China continues to improve for carbon dioxide and semiconductor laser systems. Based upon customer profiles, many of these orders are targeted at the Chinese domestic market, which is consistent with stimulus programs to promote manufacturing infrastructure. Orders for lower power carbon dioxide lasers in Europe and North America also showed improvement, painting a geographically consistent picture of stabilization and recovery.

Scientific and Government Programs

The record surge in orders in the fourth quarter of fiscal 2009 was due to three factors: continued strong customer acceptance of our ultrafast portfolio, stimulus money in the U.S. and a strong performance in Japan and Australia. We established new bookings records for Chameleon™ series lasers, used predominantly for biological imaging, and our full range of amplifiers that support basic research in chemistry, physics and material science. Our orders in the fourth quarter of fiscal 2009 included some stimulus-based orders in the U.S. from the National Science Foundation, or NSF, and we believe that stimulus funds will continue to flow in fiscal 2010. Bookings in the Asia-Pacific region benefitted from stimulus money for basic research in Japan and pent-up demand in Australia. In contrast, orders in China were at ordinary levels as government incentives favored manufacturing infrastructure over research and development.

Net Sales

Net sales include sales of lasers, related accessories and service contracts. Net sales for fiscal 2009 decreased 27.3% from fiscal 2008. Net sales for fiscal 2008 decreased 0.3% from fiscal 2007. For a more complete 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 CLC decreased to 26.4% in fiscal 2009 from 39.8% in fiscal 2008 and 42.1% in fiscal 2007. Gross profit percentage for SLS decreased to 41.4% in fiscal 2009 from 43.7% in fiscal 2008, but increased from 41.8% in fiscal 2007 to 43.7% in fiscal 2008. For a more complete 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 14.1% from 12.4% in both fiscal 2008 and fiscal 2007. R&D percentage increased primarily due to lower sales volumes, partially offset by lower R&D spending. For a more complete 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 are 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 more complete description of the reasons for changes in Net Cash Provided by Operating Activities refer to the "Liquidity and Capital Resources" section below.

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 360 days for years. DSO in receivables indicates how well we are managing our collection of receivables, with lower DSO in receivables resulting in more cash flow availability. The more money we have tied up in receivables, the less money we have available for research and development, acquisitions, expansions, marketing and other activities to grow our business. Our DSO in receivables for fiscal 2009 increased 3.3 days from fiscal 2008 to 61.3 days. The increase in DSO in receivables is primarily due to the impact of foreign exchange rates and slower collections due to the current economic climate, particularly in Europe and Japan.

Days Sales Outstanding in Inventories

We calculate DSO in inventories as net inventories at the end of the period divided by net sales of the period and then multiplied by the number of days in the period, using 360 days for years. This indicates how well we are managing our inventory levels, with lower DSO in inventories resulting in more cash flow availability. The more money we have tied up in inventory, the less money we have available for research and development, acquisitions, expansion, marketing and other activities to grow our business. Our DSO in inventories for fiscal 2009 increased 8.3 days from fiscal 2008 to 80.7 days. The deterioration in DSO in inventories is primarily due to lower revenues in fiscal 2009 compared to fiscal 2008 partially offset by reduced inventories due to site consolidations, increase in outsourcing and other inventory reduction programs.

Capital Spending as a Percentage of Net Sales

Capital spending as a percentage of net sales ("capital spending percentage") is calculated as capital expenditures for the period divided by net sales for the period. Capital spending percentage indicates the extent to which we are expanding or improving our operations, including investments in technology. Management monitors capital spending levels as this assists management in measuring our cash flows, net of capital expenditures. Our capital spending percentage increased from 3.8% in fiscal 2008 to 5.0% in fiscal 2009 and increased from 3.6% in fiscal 2007 to 3.8% in fiscal 2008. The fiscal 2009 increase was primarily due to lower revenues in fiscal 2009 as well as the purchase of assets in support of a more effective business model for our semiconductor business and building investments related to our facilities consolidation and relocation programs. The fiscal 2008 increase was primarily due to building improvements, information technology expenditures and purchases of production-related assets. We anticipate that capital spending for fiscal 2010 will be approximately 3.5% of net sales.

SIGNIFICANT EVENTS

In April 2007, we acquired Nuvonyx, Inc., a technology leader in high-power laser diode components, arrays, and industrial laser systems for materials processing and defense applications for approximately \$14.0 million in cash, net of acquisition costs of \$0.3 million. Nuvonyx produces high power arrays with powers in excess of 50 Kilowatts through its proprietary cooling and stacking technologies. The industrial laser systems are used for cladding and hardening of metals, joining materials, and other materials processing applications.

In September 2007, we sold substantially all of the net assets of our U.K. subsidiary, Coherent Imaging Optics Limited (CIOL), to CVI Laser (CVI) for \$6.5 million, resulting in an after-tax gain on the sale of \$0.7 million. In September 2007, we sold our Condensa building in Santa Clara, California for approximately \$24.8 million, resulting in a capital gain of approximately \$3.6 million in the fourth quarter of fiscal 2007. In September 2007, we also sold our Auburn campus in Auburn, California, for approximately \$9.8 million, resulting in a loss of approximately \$12.6 million in the fourth quarter of fiscal 2007. We have not recognized any tax benefit on the net loss of \$9.0 million generated by the Condensa and Auburn transactions since it is not considered realizable.

On February 12, 2008, the Company announced that the Board of Directors had authorized the Company to repurchase up to \$225 million of its common stock through a modified "Dutch Auction" tender offer and an additional \$25 million of its common stock, following the completion or termination of the tender offer, under its stock repurchase program, terminating no later than February 11, 2009. On March 17, 2008, we completed our tender offer and repurchased and retired 7,972,313 shares of outstanding common stock at a price of \$28.50 per share for a total of \$228.2 million, including expenses. Such repurchases were accounted for as a reduction in additional paid in capital.

Effective March 31, 2008, we entered into a \$40 million unsecured revolving credit account with Union Bank of California, which expires on March 31, 2010. Our Union Bank of California agreement is subject to covenants related to financial ratios and tangible net worth.

On April 16, 2008, we announced that we entered into an agreement to sell certain assets of our Auburn Optics manufacturing operation to Research Electro-Optics, Inc. ("REO"), a privately held optics manufacturing and technology company. We also entered into a strategic supply agreement with REO. REO is providing optical manufacturing capabilities for us, including fabrication and coating of optical components. The transition of the optics manufacturing assets from Auburn to REO was substantially completed by the end of the second quarter of fiscal 2009.

During the first quarter of fiscal 2009, our stock price declined substantially, which combined with expectations of declines in forecasted operating results due to the slowdown in the global economy, led us to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of December 27, 2008, we performed an interim goodwill impairment evaluation, as required under FASB Accounting Standards Codification ("ASC") 350 "Intangibles—Goodwill and Other". The performance of this test is a two-step process. Management reviewed the results of the Step 1 analysis and concluded that a Step 2 analysis was required only for the CLC reporting unit. Our preliminary analysis indicated that the entire balance of the goodwill in the CLC reporting unit at that date was impaired and we recorded a non-cash goodwill impairment charge of \$19.3 million in the first quarter of fiscal 2009. During the second quarter of fiscal 2009, we completed the Step 2 analysis for the CLC reporting unit at December 27, 2008 and determined that the entire balance of goodwill in the CLC reporting unit at that date was impaired. The estimated fair value of our SLS reporting unit exceeded its carrying value so no further impairment analysis was required for this reporting unit.

During the second quarter of fiscal 2009, our expectations of declines in forecasted operating results due to the slowdown in the global economy and the further declines in our stock price led us to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of April 4, 2009, we performed an interim goodwill impairment evaluation, as required under ASC 350-10. This interim impairment evaluation utilized the same valuation techniques used in our impairment valuation in the first quarter of fiscal 2009. A similar sensitivity analysis was also done at April 4, 2009 where we determined that the discount rate used in the Income approach for the SLS reporting unit could have been increased by approximately 20% and still resulted in no impairment. Based on the results of our Step 1 analysis, we determined that no additional goodwill impairment was indicated. During the remaining quarters of fiscal 2009, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment. We performed our annual goodwill impairment review at the beginning of the fourth quarter of fiscal 2009 and noted no impairment.

We have initiated the planning phase of a multiyear project, with a targeted completion date of September 2010, to exit our epitaxial growth facility in Tampere, Finland and establish enhanced capabilities in Sunnyvale, California. We completed the consolidation of the remainder of our Munich facility into our Göttingen site during third quarter of fiscal 2009. During the second quarter of fiscal 2009, we substantially completed the transition of our optics manufacturing assets from Auburn, California to REO, and announced that we would be exiting our facility in St. Louis, Missouri. We completed the exit from St. Louis, Missouri in the fourth quarter of fiscal 2009.

RESULTS OF OPERATIONS—FISCAL 2009, 2008 AND 2007

Fiscal 2009 included 53 weeks; fiscal 2008 and 2007 included 52 weeks.

Effective as of the beginning of the first quarter of fiscal 2009, in order to align all of our diode-pumped solid state ("DPSS") technology into the same reportable operating segment, management moved the DPSS Germany and Crystal product families from the CLC segment into the SLS segment. The Crystal product family is primarily an internal supplier that supports the DPSS product family. This allows for leverage and efficiencies in many parts of the business. This concentrates all DPSS product families in the SLS segment effective as of the first quarter of fiscal 2009. All of reporting has been revised to reflect the reportable operating segments (CLC and SLS) and prior periods have been restated.

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 statement of operations:

		Fiscal	
	2009	2008	2007
	(As a per	centage of n	et sales)
Net sales	100.0%	100.0%	100.0%
Cost of sales	63.0%	58.0%	58.4%
Gross profit	37.0%	42.0%	41.6%
Operating expenses:			
Research and development	14.1%	12.4%	12.4%
In-process research and development	%	%	0.4%
Selling, general and administrative	24.8%	24.5%	25.6%
Impairment of goodwill	4.4%	%	%
Amortization of intangible assets	1.7%	1.4%	1.4%
Total operating expenses	45.0%	38.3%	39.8%
Income (loss) from operations	(8.0)%	3.7%	1.8%
Other income (expense):			
Interest and dividend income	0.6%	1.8%	3.8%
Interest expense	(0.1)%	%	(1.8)%
Other—net.	(0.7)%	0.7%	1.0%
Total other income (expense), net	(0.2)%	2.5%	3.0%
Income (loss) before income taxes	(8.2)%	6.2%	4.8%
Provision for (benefit from) income taxes	(0.1)%	2.3%	2.1%
Net income (loss)	(8.1)%	3.9%	2.7%

Refer to Item 6 "Selected Financial Data" for a description of significant events that impacted the results of operations for fiscal years 2009, 2008 and 2007.

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 2009 Fis		Fiscal	2008	Fiscal 2007	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales	Amount	Percentage of total net sales
Consolidated:						
Microelectronics	\$132,152	30.3%	\$206,256	34.4%	\$210,765	35.0%
Scientific and government programs	122,863	28.2%	125,000	20.9%	120,858	20.1%
OEM components and instrumentation	119,795	27.5%	173,835	29.0%	174,115	29.0%
Materials processing.	61,072	14.0%	94,171	15.7%	95,415	15.9%
Total	\$435,882	100.0%	\$599,262	100.0%	\$601,153	100.0%

During fiscal 2009, net sales decreased by \$163.4 million, or 27%, compared to fiscal 2008, including a decrease of \$7.0 million due to the impact of foreign currency exchange rates, with sales decreasing in all four markets. Microelectronics sales decreased \$74.1 million, or 36%, primarily due to lower sales in advanced packaging, flat panel display and semiconductor applications. A drop in consumer confidence and spending continued to impact this market negatively during fiscal 2009. The decrease in the OEM components and instrumentation market of \$54.0 million, or 31%, during fiscal 2009 was primarily due to reduced consumer spending for medical applications, decreased shipments for bioinstrumentation applications, lower shipments for military applications (primarily due to the sales of assets and outsourcing of our optics manufacturing) and lower shipments for

graphic arts and display applications. Materials processing sales decreased \$33.1 million, or 35%, during fiscal 2009 primarily due to lower laser shipments to customers providing consumer-based applications. The decrease in scientific and government program market sales of \$2.1 million, or 2%, during fiscal 2009 was due to lower demand from university and government research groups.

During fiscal 2008, net sales decreased by \$1.9 million, or less than 1%, compared to fiscal 2007, including an increase of \$22.1 million due to the impact of foreign currency exchange rates. The decrease was a result of decreased sales in the microelectronics, materials processing and OEM components and instrumentation markets, partially offset by increases in the scientific and government programs market. Microelectronics sales decreased \$4.5 million, or 2%, primarily due to lower sales in the flat panel display market and for semiconductor applications, partially offset by higher sales in advanced packaging and solar cell production applications. The decrease in the materials processing market of \$1.2 million, or 1%, during fiscal 2008 was primarily due to lower sales in textile processing (light manufacturing) applications partially offset by higher sales for marking applications. The decrease in the OEM components and instrumentation market of \$0.3 million during fiscal 2008 was primarily due to the sale of substantially all of the assets of CIOL in the fourth quarter of fiscal 2007, partially offset by higher sales for medical and bioinstrumentation applications, including revenues contributed by Nuvonyx (acquired in the third quarter of fiscal 2007). Scientific and government program sales increased \$4.1 million, or 3%, due to higher demand for advanced research and pumping applications used by university and government research groups.

In fiscal 2009, 2008 and 2007, no customers accounted for greater than 10% of net sales.

Segments

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 2009		Fiscal 2008		Fiscal 2007	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales	Amount	Percentage of total net sales
Consolidated:						
Commercial Lasers and Components (CLC)	\$125,619	28.8%	\$198,748	33.2%	\$208,868	34.7%
Specialty Lasers and Systems (SLS)	310,163	71.2%	400,414	66.8%	390,616	65.0%
Corporate and other	100	%	100	%	1,669	0.3%
Total	\$435,882	100.0%	\$599,262	100.0%	\$601,153	100.0%

Net sales for fiscal 2009 decreased \$163.4 million, or 27%, compared to fiscal 2008, with decreases of \$90.3 million, or 23%, in our SLS segment and decreases of \$73.1 million, or 37%, in our CLC segment. Net sales for fiscal 2008 decreased \$1.9 million, or less than 1%, compared to fiscal 2007, with decreases of \$10.1 million, or 5%, in our CLC segment, decreases of \$1.6 million in Corporate and other and increases of \$9.8 million, or 3%, in our SLS segment.

The decrease in our CLC segment sales from fiscal 2008 to fiscal 2009 was primarily due to lower sales in advanced packaging, materials processing and semiconductor applications sales.

The decrease in our CLC segment sales from fiscal 2007 to fiscal 2008 was primarily due to the sale of substantially all of the assets of CIOL in the fourth quarter of fiscal 2007 and lower sales for graphic arts and display and semiconductor applications partially offset by increased sales for military applications, including revenues contributed by Nuvonyx (acquired in the third quarter of fiscal 2007) and higher sales for bio-instrumentation applications.

The decrease in our SLS segment sales from fiscal 2008 to fiscal 2009 was primarily due to lower revenue for bio-instrumentation, medical, microelectronics and semiconductor applications. The increase in our SLS segment sales from fiscal 2007 to fiscal 2008 was primarily due to higher sales for advanced packaging, medical, flat panel display and solar cell production applications.

Corporate and other sales decreased \$1.6 million from fiscal 2007 to fiscal 2008 due to non-recurring royalty revenue in fiscal 2007.

Gross Profit

Consolidated

Our gross profit rate decreased by 5.0% to 37.0% in fiscal 2009 from 42.0% in fiscal 2008. The decrease in the gross profit rate was primarily due to higher other costs (1.8%) due to higher inventory provisions and the impact of lower sales volumes, unfavorable impact of fixed manufacturing costs on lower sales volumes net of the benefit of a weakened Euro and favorable product mix in the instrumentation market partially offset by the less favorable microelectronics market mix (1.8%) and the incremental impact of restructuring activities (1.5%) partially offset by lower stock-based compensation expense (0.2%).

Our gross profit rate increased by 0.4% to 42.0% in fiscal 2008 from 41.6% in fiscal 2007. The increase in the gross profit rate was primarily due to improved product mix (2.3%) with higher volumes of medical applications sales, the sale of substantially all of the assets of CIOL in the fourth quarter of fiscal 2007 and improved yields and lower warranty costs (0.3%), partially offset by higher other costs due to higher inventory provisions and increased costs for freight and duty (1.3%), the impact of fiscal 2008 restructuring activities (0.7%) and higher installation costs (0.2%) for excimer and scientific products.

Our gross profit rate has been and will continue to be affected by a variety of factors including market mix, manufacturing efficiencies, excess and obsolete inventory write-downs, warranty costs, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, commodity prices and foreign currency fluctuations.

Commercial Lasers and Components

Our gross profit rate decreased by 13.4% to 26.4% in fiscal 2009 from 39.8% in fiscal 2008. The decrease in gross profit rate was primarily due to higher product costs primarily due to the impact of lower volumes and unfavorable product mix with a higher proportion of net sales in lower margin markets (6.5%), higher other costs (3.3%) due to higher inventory provisions, the incremental impact of restructuring activities (2.8%) and higher warranty and installation costs (0.8%).

Our gross profit rate decreased by 2.3% to 39.8% in fiscal 2008 from 42.1% in fiscal 2007. The decrease in gross profit rate was primarily due to higher other costs due to higher inventory provisions and increased costs for freight and duty (2.5%) and the impact of fiscal 2008 restructuring activities (1.4%), partially offset by favorable product cost (1.4%) primarily due to the impact of the sale of substantially all of the assets of CIOL in the fourth quarter of fiscal 2007.

Specialty Lasers and Systems

Our gross profit rate decreased by 2.3% to 41.4% in fiscal 2009 from 43.7% in fiscal 2008. The decrease in gross profit rate was primarily due to higher other costs (1.3%) due to higher inventory provisions and the impact of lower sales volumes, the incremental impact of restructuring activities (1.0%) and the impact of lower sales volumes net of a favorable product mix from the instrumentation market partially offset by less favorable mix from the microelectronics market and the benefit of a weakened Euro (0.2%) partially offset by lower warranty and installation costs (0.1%).

Our gross profit rate increased by 1.9% to 43.7% in fiscal 2008 from 41.8% in fiscal 2007. The increase in the gross profit rate was primarily due to more favorable product mix (2.7%) within the microelectronics and medical markets, including a large customer order cancellation fee at high margins in the third quarter of fiscal 2008 (0.4%) coupled with improved manufacturing efficiencies and lower scrap and rework costs as well as higher warranty and installation costs (0.2%) partially offset by higher other costs due to higher inventory provisions and increased costs for freight and duty (0.7%) and the incremental impact of restructuring activities (0.3%).

Operating Expenses

	Fiscal						
	2009		2008		20	07	
	Amount	Percentage of total net sales	Amount	Percentage of total net sales	Amount	Percentage of total net sales	
			(Dollars in	thousands)			
Research and development	\$61,417	14.1%	\$74,287	12.4%	\$74,590	12.4%	
In-process research and development	_	<u> </u>	_	%	2,200	0.4%	
Selling, general and administrative	108,098	24.8%	146,376	24.5%	153,945	25.6%	
Impairment of goodwill	19,286	4.4%	_	%	_	%	
Amortization of intangible assets	7,466	1.7%	8,651	1.4%	8,152	1.4%	
Total operating expenses	\$196,267	45.0%	\$229,314	38.3%	\$238,887	39.8%	

Research and development

Fiscal 2009 research and development ("R&D") expenses decreased \$12.9 million, or 17.3%, from fiscal 2008. The decrease was primarily due to lower payroll and bonus spending including mandatory time off in fiscal 2009 and the impact of lower headcount (\$9.2 million), lower spending on projects (\$4.3 million), the impact of foreign currency exchange rates (\$2.1 million), lower stock-related compensation expense (\$1.1 million) and a higher benefit due to decreases in deferred compensation plan liabilities (\$0.5 million) with the related decreases in deferred compensation plan assets recorded in other income (expense), partially offset by lower net reimbursements from customers for development projects (\$2.4 million) and higher restructuring costs (\$1.9 million). On a segment basis, CLC spending decreased \$6.2 million primarily due to lower project spending including lower payroll and bonus spending. SLS spending decreased \$5.9 million primarily due to lower spending on projects, lower payroll and bonus spending and the impact of foreign currency exchange rates. Corporate and other spending decreased \$0.8 million.

Fiscal 2008 R&D expenses decreased \$0.3 million, or 0.4%, from fiscal 2007. The decrease was primarily due to lower spending on greening (compliance with environmental-related regulations, primarily in Europe and the People's Republic of China), semiconductor and other projects (\$2.3 million) and higher benefit due to decreases in deferred compensation plan liabilities (\$0.7 million), partially offset by the impact of foreign currency exchange rates (\$2.7 million). On a segment basis, CLC project spending increased \$1.0 million, including the impact of foreign currency exchange rates and higher spending due to the acquisition of Nuvonyx. SLS project spending, including the impact of foreign currency exchange rates, increased \$2.0 million. Corporate and other spending decreased \$3.3 million.

In-process research and development

Fiscal 2007 IPR&D expense resulted from our acquisition of Nuvonyx in the third quarter. At the date of acquisition, we immediately charged \$2.2 million to expense, representing purchased IPR&D related to two development projects that had not yet reached technological feasibility and had no alternative future use. The assigned value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the net cash flows from such project, and discounting the net cash flows back to its present value. At October 3, 2009, one project remains on hold and the other is expected to become commercially viable in the first quarter of fiscal 2010.

Selling, general and administrative

Fiscal 2009 selling, general and administrative ("SG&A") expenses decreased \$38.3 million, or 26%, from fiscal 2008. The decrease was primarily due to \$14.1 million lower payroll and bonus spending including the impact of lower headcount and mandatory time off in fiscal 2009, \$7.9 million lower costs related to our restatement of financial statements and litigation resulting from our internal stock option investigation, the impact of foreign currency exchange rates (\$4.2 million), \$3.8 million lower stock-related compensation expense, \$2.7 million lower spending on depreciation and equipment, \$2.7 million lower spending on travel, demo depreciation and advertising, \$2.4 million lower spending on legal and other consulting, a higher benefit due to decreases in deferred compensation plan liabilities (\$1.9 million) with the related decreases in deferred compensation plan assets recorded in other income (expense) and lower other spending (\$0.7 million), partially offset by \$2.1 million higher restructuring costs. On a segment basis, SLS SG&A expenses decreased \$12.2 million and CLC SG&A decreased \$7.1 million, both primarily due to lower payroll and bonus spending, the impact of foreign currency exchange rates, lower depreciation and lower spending on travel and advertising. Corporate and other spending decreased \$19.0 million primarily due to lower costs related to our restatement of

financial statements and litigation resulting from our internal stock option investigation, lower stock-related compensation expense, a higher benefit due to decreases in deferred compensation plan liabilities, lower payroll and bonus spending and lower spending on legal and other consulting.

Fiscal 2008 SG&A expenses decreased \$7.6 million, or 5%, from fiscal 2007. The decrease was primarily due to the fiscal 2007 \$12.5 million loss on the sale of our Auburn campus, \$4.1 million higher benefit due to decreases in deferred compensation plan liabilities, \$2.7 million lower costs related to our restatement of financial statements and litigation resulting from our internal stock option investigation, \$1.2 million lower spending on audit and tax services due to timing of services provided and \$0.6 million lower other spending, partially offset by the impact of foreign currency exchange rates (\$6.3 million), the fiscal 2007 gain of \$3.6 million on the sale of our Condensa facility, \$2.4 million higher stock-based compensation expense primarily due to increased charges for liabilities for stock options subject to Section 409A and higher footprint and headcount-related restructuring costs (\$1.2 million). On a segment basis, CLC SG&A expenses decreased \$11.3 million, including the fiscal 2007 \$12.5 million loss on the sale of our Auburn campus, partially offset by the impact of foreign exchange rates and restructuring costs. SLS SG&A expenses increased \$3.7 million, including the impact of foreign exchange rates, higher headcount related spending and higher sales demo costs. Spending for Corporate and other was flat, with the fiscal 2007 gain of \$3.6 million on the sale of our Condensa facility and \$2.5 million higher stock-related compensation expense primarily due to increased charges for liabilities for stock options subject to Section 409A offset by \$4.1 million lower expense for deferred compensation plan liabilities and \$2.7 million lower costs related to our restatement of financial statements and litigation resulting from our internal stock option investigation.

Impairment of goodwill

In accordance with ASC 350, goodwill is tested for impairment on an annual basis and between annual tests in certain circumstances, and written down when impaired. During the first quarter of fiscal 2009, our stock price declined substantially, which combined with expectations of declines in forecasted operating results due to the slowdown in the global economy, led the Company to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of December 27, 2008, we performed an interim goodwill impairment evaluation which indicated that the goodwill was fully impaired. We recorded a non-cash goodwill impairment charge of \$19.3 million in the CLC reporting unit in the first quarter of fiscal 2009.

Amortization of intangible assets

Amortization of intangible assets decreased \$1.2 million, or 14%, from fiscal 2008 to fiscal 2009 primarily due to the completion of amortization of certain intangibles related to prior acquisitions.

Amortization of intangible assets increased \$0.5 million, or 6%, from fiscal 2007 to fiscal 2008 primarily due to the amortization of intangibles related to our April 2007 Nuvonyx acquisition.

Other income (expense), net

Other income (expense), net, decreased \$15.4 million from fiscal 2008 to fiscal 2009. The decrease was primarily due to lower interest income (\$8.4 million) as a result of lower rates of return and lower average cash, cash equivalents and short-term investments balances, higher expense due to decreases in deferred compensation plan assets (\$3.3 million) and higher foreign currency exchange losses (\$3.1 million).

Other income (expense), net, decreased \$3.1 million from fiscal 2007 to fiscal 2008. The decrease was primarily due to lower interest income (\$12.3 million) as a result of lower average cash, cash equivalents and short-term investments balances as well as lower rates of return, lower gains, net of expenses, on our deferred compensation plan assets (\$3.9 million) and lower sublease income (\$0.8 million), partially offset by lower interest expense (\$10.7 million) primarily due to the payoff of our convertible subordinated notes in the fourth quarter of fiscal 2007, Japan consumption tax savings (\$3.3 million) and higher foreign currency exchange gains (\$0.7 million).

Income taxes

The difference between the statutory rate of 35.0% and our effective tax rate of 1.5% on income (loss) before income taxes for fiscal 2009, which represents a current year benefit, was due primarily to permanent differences related to the non-deductibility of the goodwill impairment charge, an increase in valuation allowance against California research and development tax credits as a result of California legislation enacted in February 2009 and certain foreign net operating loss carryforwards, and deemed dividend inclusions under the Subpart F tax rules. These amounts are partially offset by permanent differences related to the benefit of foreign tax credits and the benefit of federal research and development tax credits, including additional credits reinstated from fiscal 2008 resulting from the enactment of the "Emergency Economic Stabilization Act of 2008."

During fiscal 2009, we increased our valuation allowance on deferred tax assets to \$6.8 million, primarily due to California R&D tax credits as a result of new California legislation and the ability to utilize foreign net operating losses. During fiscal 2008, we decreased our valuation allowance on deferred tax assets to \$1.7 million, primarily due to the expiration of federal and state capital loss carryforwards. In addition, the valuation allowance with respect to the loss from the disposal of our Auburn facility in California was also reduced with a corresponding increase in uncertain tax positions. During fiscal 2007, we increased our valuation allowance on deferred tax assets to \$24.1 million, primarily due to the carryforward of additional losses from the disposal of our Auburn facility in California. In making the determination to record the valuation allowance, management considered the likelihood of future taxable income and feasible and prudent tax planning strategies to realize deferred tax assets. In the future, if we determine that we expect to realize more or less of the deferred tax assets, an adjustment to the valuation allowance will affect income in the period such determination is made.

The "Emergency Economic Stabilization Act of 2008," which contains the "Tax Extenders and Alternative Minimum Tax Relief Act of 2008", was enacted on October 3, 2008. Under the Act, the federal R&D credit was retroactively extended for amounts paid or incurred after December 31, 2007 and before January 1, 2010. The effects of the change in the tax law were recognized in our first quarter of fiscal 2009, which is the quarter in which the law was enacted. In addition to the federal legislation, California Assembly Bill 1452 was enacted on September 30, 2008. This legislation limits the California R&D credit to 50% of the California tax liability for tax years beginning on or after January 1, 2008 and before January 1, 2010. New California budget legislation was also signed on February 20, 2009 that allows taxpayers to make an annual election of a single sales factor apportionment formula for tax years beginning on or after January 1, 2011. We recognized the effects of these changes in the California legislation in our second quarter of fiscal 2009.

The effective tax rate on income before income taxes for fiscal 2008 of 37.2% was higher than the statutory rate of 35.0%. This was primarily due to permanent differences related to foreign currency exchange gains on previously taxed income distributions from foreign subsidiaries and deemed dividend inclusions under the Subpart F rules, partially offset by the benefit of foreign tax credits and research and development tax credits.

The effective tax rate on income before income taxes for fiscal 2007 of 44.9% was higher than the statutory rate of 35.0%. This was primarily due to permanent differences related to deemed dividend inclusions under the Subpart F rules, an increase in valuation allowance against certain loss carryforwards and the non-deductibility of IPR&D expense related to the Nuvonyx acquisition, partially offset by the benefit of foreign tax credits and research and development tax credits.

FINANCIAL CONDITION

Liquidity and capital resources

Sources and Uses of Cash

Historically, our primary source of cash has been provided through operations. Other sources of cash in the past three fiscal years include proceeds received from the sale of our stock through our employee stock option and purchase plans, as well as through debt borrowings. Our historical uses of cash have primarily been for the repurchase of our common stock, capital expenditures, acquisitions of businesses and technologies and payments of principal and interest on outstanding debt obligations. 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):

	Fiscal		
	2009	2008	2007
Net cash provided by operating activities	\$39,049	\$68,362	\$66,619
Sales of shares under employee stock plans	4,674	16,509	3,783
Repurchase of common stock	_	(228,214)	
Capital expenditures	(21,627)	(22,612)	(21,693)
Acquisition of businesses, net of cash acquired		_	(14,228)
Net payments on debt borrowings	(8)	(8)	(200,209)

Net cash provided by operating activities decreased by \$29.3 million in fiscal 2009 compared to fiscal 2008 and increased by \$1.7 million in fiscal 2008 compared to fiscal 2007. The decrease in cash provided by operating activities in fiscal 2009 was primarily due to lower net income and lower net cash flows from deferred income taxes partially offset by higher cash flows from inventories and accounts receivable. The increase in cash provided by operating activities in fiscal 2008 was primarily due to higher

net income and higher cash flows from other receivables and other assets, partially offset by lower cash flows from the proceeds from sales of fixed assets and other current liabilities. We believe that our existing cash, cash equivalents and short term investments combined with cash to be provided by operating activities 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. However, we may elect to finance certain of our capital expenditure requirements through borrowings under our bank credit facilities or 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 pursuing acquisition opportunities at valuations we believe are reasonable based upon market conditions as demonstrated by our recent acquisition of businesses from StockerYale in the first quarter of fiscal 2010 (see Note 19 "Subsequent Events" in the Notes to Consolidated Financial Statements). 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 primarily through unrestricted cash balances and cash flows from operations. If required, we will look for additional borrowings or 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 from time to time and the willingness of potential sellers to accept it as full or partial payment.

During fiscal year 2008, we initiated restructuring plans to decrease costs by reducing our workforce and by consolidating facilities. As of October 3, 2009, we had made payments in connection with the restructuring plans in the amount of \$17.4 million. We expect to complete payments for substantially all anticipated costs related to the restructuring plans by the end of fiscal 2010.

Additional sources of cash available to us were multi-currency and domestic lines of credit and bank credit facilities totaling \$57.3 million as of October 3, 2009, of which \$56.0 million was unused and available. These credit facilities were used in Europe during fiscal 2009 as guarantees. Our domestic line of credit includes a \$40 million unsecured revolving credit account with Union Bank of California, which expires on March 31, 2010 and is subject to covenants related to financial ratios and tangible net worth. No amounts have been drawn upon our domestic line of credit and \$1.3 million has been used of the multi-currency lines as of October 3, 2009.

Our ratio of current assets to current liabilities was 5.6:1 at October 3, 2009, compared to 4.5:1 at September 27, 2008. The increase in our ratio is primarily due to increases in short-term investments. Our cash position, short-term investments, working capital and debt obligations are as follows (in thousands):

	Fiscal		
	2009	2008	
Cash and cash equivalents	\$199,950	\$213,826	
Short-term investments.	43,685	4,268	
Restricted cash, current	_	2,645	
Working capital	396,428	396,456	
Total debt obligations	15	24	

Current Restricted Cash

As part of our tender offer to purchase the remaining outstanding shares of Lambda Physik, we were required by local regulations to have funds available for the offer in an account located in Germany. As of September 27, 2008, we had \$2.6 million restricted for remaining close out costs associated with our purchase of the remaining outstanding shares of Lambda Physik, which are included in current restricted cash on our consolidated balance sheets. We completed the transaction in the first quarter of fiscal 2009, and have no restricted funds remaining on our balance sheet as of October 3, 2009.

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 contractual obligations at October 3, 2009 and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

		Less than			More than
	Total	1 year	1 to 3 years	3 to 5 years	5 years
Long-term debt payments	\$15	\$9	\$6	\$	\$
Operating lease payments.	31,715	7,669	10,832	7,063	6,151
Asset retirement obligations	2,119	405		1,073	641
Purchase commitments with suppliers	9,930	9,930			_
Purchase obligations	5,169	4,144	1,025		
Total	\$48,948	\$22,157	\$11,863	\$8,136	\$6,792

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 \$24.9 million at October 3, 2009.

During the first quarter of fiscal 2008, we adopted the provisions of FASB Accounting Standards Codification ("ASC") 740, "Income Taxes" (formerly FASB Financial Interpretation No. 48, Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109). We had historically classified interest and penalties and unrecognized tax benefits as current liabilities. With this adoption, we classify gross interest and penalties and unrecognized tax benefits that are not expected to result in payment or receipt of cash within one year as non-current liabilities within the consolidated balance sheets. As of October 3, 2009, we recorded gross unrecognized tax benefits of \$58.1 million and gross interest and penalties of \$7.7 million, both of which are classified as non-current liabilities in the consolidated balance sheet. At this time, we are unable to make a reasonably reliable estimate of the timing of payments in individual years due to uncertainties in the timing of tax audit outcomes. As a result, these amounts are not included in the table above.

Changes in financial condition

Cash provided by operating activities in fiscal 2009 was \$39.0 million, which included cash provided by operating assets and liabilities of \$32.9 million, depreciation and amortization of \$26.7 million, the non-cash charge for impairment of goodwill of \$19.3 million, stock-based compensation expense of \$7.4 million and other items aggregating \$0.2 million, partially offset by the net loss of \$35.3 million and increases in net deferred tax assets of \$12.2 million.

Cash used in investing activities in fiscal 2009 of \$56.9 million included \$39.4 million, net, purchases from available-for-sale securities and \$21.6 million used to acquire property and equipment and improve buildings partially offset by \$1.6 million proceeds from dispositions of property and equipment and a decrease in restricted cash of \$2.5 million.

Cash provided by financing activities in fiscal 2009 was \$4.2 million, including \$4.7 million generated from our employee stock purchase plans partially offset by a \$0.5 million decrease in cash overdraft.

Changes in exchange rates in fiscal 2009 used \$0.2 million.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2. "Significant Accounting Policies" in the Notes to Consolidated Financial Statements 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 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 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, accounting for long-lived assets (including goodwill and intangible assets), inventory valuation, warranty reserves, stock-based compensation and accounting for income taxes.

Revenue Recognition

We recognize revenue when all four revenue recognition criteria have been met: persuasive evidence of an arrangement exists, the product has been delivered or the service has been rendered, the price is fixed or determinable and collection is probable. Revenue from product sales is recorded when all of the foregoing conditions are met and risk of loss and title passes to the customer. Our products typically include a warranty and the estimated cost of product warranty claims (based on historical experience) is recorded at the time the sale is recognized. Sales to customers are generally not subject to any price protection or return rights.

The vast majority of our sales are made to original equipment manufacturers (OEMs), distributors, resellers and end-users in the non-scientific market. Sales made to these customers do not require installation of the products by us and are not subject to other post-delivery obligations, except in occasional instances where we have agreed to perform installation or provide training. In those instances, we defer revenue related to installation services or training until these services have been rendered. We allocate revenue from multiple element arrangements to the various elements based upon relative fair values.

Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected. Failure to obtain anticipated orders due to delays or cancellations of orders could have a material adverse effect on our revenue. In addition, pressures from customers to reduce our prices or to modify our existing sales terms may have a material adverse effect on our revenue in future periods.

Our sales to distributors, resellers and end-user customers typically do not have customer acceptance provisions and only certain of our sales to OEM customers 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 higher than published specifications, (1) the products are tested and accepted by the customer at our site or by the customer's acceptance of the results of our testing program prior to shipment to the customer, or (2) the revenue is deferred until customer acceptance occurs.

Sales to end-users in the scientific market typically require installation and, thus, involve post-delivery obligations; however our post-delivery installation obligations are not essential to the functionality of our products. We defer revenue related to installation services until completion of these services.

For most products, training is not provided; therefore, no post-delivery training obligation exists. However, when training is provided to our customers, it is typically priced separately and recognized as revenue after these services have been provided.

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: CLC and SLS.

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). We perform our annual impairment tests at the beginning of 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.

During the first quarter of fiscal 2009, our stock price declined substantially which, combined with expectations of declines in forecasted operating results due to the slowdown in the global economy, led the Company to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of December 27, 2008, we performed an interim goodwill

impairment evaluation, as required under ASC 350-10 "Intangibles—Goodwill and Other". Under this guidance, goodwill is tested for impairment by comparing the respective fair value with the respective carrying value of the reporting unit. If such comparison indicates a potential impairment, then the impairment is determined as the difference between the recorded value of goodwill and its fair value. The performance of this test is a two-step process.

Step 1 of the impairment test involves comparing the fair values of the applicable reporting units with their aggregate carrying values, including goodwill. If the carrying amount of a reporting unit exceeds the reporting unit's fair value, we perform Step 2 of the goodwill impairment test to determine the amount of impairment loss if any. Step 2 of the goodwill impairment test involves comparing the implied fair value of the affected reporting unit's goodwill against the carrying value of that goodwill.

We rely on the following three valuation approaches to determine the fair value of both of our reporting units. (1) 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. This rate of return or cost of capital is weighted based on the capitalization of comparable companies. (2) The Market approach determines fair value by comparing the reporting units to comparable companies in similar lines of business that are publicly traded. 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. These multiples are then applied to the reporting unit's operating results to obtain an estimate of fair value. (3) The Transaction approach estimates the fair value of the reporting unit based on market prices in actual transactions. A comparison is done between the reporting units and other similar businesses. Total Enterprise Value multiples for revenue and earnings as noted in the Market approach above are calculated from the comparable companies and then applied to the reporting unit's operating results to obtain an estimate of fair value. Each of these three approaches captures aspects of value in each reporting unit. The Income approach captures our expected future performance, the Market approach captures how investors view the reporting units through other competitors; and, the Transaction approach captures value through transactions for sales of similar types of companies. We believe these valuation approaches are proven valuation techniques and methodologies for our industry and are widely accepted by investors.

We weighted each of these approaches equally as none are perceived by us to deliver any greater indication of value than the other. The sensitivity analysis performed by management determined that by changing the weighting placed on the three approaches, the result of the Step 1 test for both reporting units was not affected.

The valuation analysis requires significant judgments and estimates to be made by management in particular related to the forecast. The assumed growth rates and gross margins as well as period expenses were determined based on internally developed forecasts considering our future plans. The assumptions used were management's best estimates based on projected results and market conditions as of the date of testing. In order to test the sensitivity of these fair values, management further reviewed other scenarios relative to these assumptions to see if the resulting impact on fair values would have resulted in a different Step 1 conclusion for the CLC and SLS reporting units.

Based on these forecast scenarios, the fair value of both reporting units was re-calculated. In addition, this sensitivity analysis applied more conservative assumptions with regard to control premiums as well as multipliers used in the Market approach and the Transaction approach. In each of the sensitivity analyses performed, the CLC reporting unit failed and the SLS reporting unit passed. None of the outcomes of the sensitivity analyses performed would have impacted our Step 1 conclusions or the non-cash impairment charge for goodwill of \$19.3 million recorded in the first quarter of fiscal 2009.

Sensitivity was also applied to the discount rate used in the Income approach for both the CLC and SLS reporting units. At December 27, 2008, the discount rate for the CLC reporting unit could have been reduced by more than 40% and still resulted in a failure. For the SLS reporting unit, the discount rate could have been increased by more than 40% and still resulted in no impairment.

During the second quarter of fiscal 2009, our expectations of declines in forecasted operating results due to the slowdown in the global economy and the further declines in our stock price led us to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of April 4, 2009, we performed an interim goodwill impairment evaluation, as required under ASC 350-10. This interim impairment evaluation utilized the same valuation techniques used in our impairment valuation in the first quarter of fiscal 2009. A similar sensitivity analysis was also done at April 4, 2009 where we determined that the discount rate used in the Income approach for the SLS reporting unit could have been increased by approximately 20% and still resulted in no impairment. Based on the results of our Step 1 analysis, we determined that no additional goodwill impairment was indicated.

During the third quarter of fiscal 2009, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment.

At October 3, 2009, we had \$67.0 million of goodwill, \$19.7 million of purchased intangible assets and \$98.8 million of property and equipment on our consolidated balance sheet. We performed our annual goodwill impairment testing at the beginning of the fourth quarter using the opening balance sheet as of the first day of the fourth fiscal quarter and noted no impairment. As noted in the valuation analysis discussion above, such analysis requires significant judgments and estimates to be made by management in particular related to the forecast. The assumed growth rates and gross margins as well as period expenses were determined based on internally developed forecasts considering our future plans. The assumptions used were management's best estimates based on projected results and market conditions as of the date of testing. In order to test the sensitivity of these fair values, management further reviewed other scenarios relative to these assumptions to see if the resulting impact on fair values would have resulted in a different conclusion for the CLC and SLS reporting units. As no impairment indicators were present during the fourth quarter of fiscal 2009, we believe these values remain recoverable.

It is reasonably possible that the estimates of anticipated future net revenue, the remaining estimated economic life of the products and technologies, or both, could differ from those used to assess the recoverability of these assets. In addition, if the price of our common stock were to significantly decrease combined with any other adverse change in market conditions, thus indicating that the underlying fair value of our reporting units or other long-lived assets may have decreased, we may be required to assess the recoverability of such assets in the period such circumstances are identified. In that event, additional impairment charges or shortened useful lives of certain long-lived assets may be required. Such testing was done on our long-lived assets and intangibles in prior to the Step 1 testing discussed above, and no impairment was noted.

Inventory Valuation

We record our inventory at the lower of cost (computed on a first-in, first-out basis) or market. 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 and when individual parts have been in inventory for greater than 12 months. 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 a twenty month period starting from the fourth month after such inventory is placed in service.

Warranty Reserves

We provide warranties on certain 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 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.

Stock-Based Compensation

We account for stock-based compensation using fair value. We estimate the fair value of stock options granted using the Black-Scholes Merton model. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. We amortize the fair value of stock options on a straight-line basis over the requisite service periods of the awards, which are generally the vesting periods. We value restricted stock units using the intrinsic value method. We amortize the value of restricted stock units on a straight-line basis over the restriction period.

U.S. GAAP requires the use of option pricing models that were not developed for use in valuing employee stock options. The Black-Scholes option-pricing model was developed for use in estimating the fair value of short-lived exchange traded options that have no vesting restrictions and are fully transferable. In addition, option-pricing models require the input of highly subjective assumptions, including the options expected life, the expected price volatility of the underlying stock and an estimate of expected forfeitures. Our computation of expected volatility considers historical volatility and market-based implied volatility. Our estimate of expected forfeitures is based on historical employee data and could differ from actual forfeitures.

See Note 14 "Employee Stock Option and Benefit Plans" in the notes to the Consolidated Financial Statements 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.

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.

Effective September 30, 2007, we adopted the provisions of ASC Subtopic 740, "Income Taxes" (formerly FASB Financial Interpretation No. 48, "Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109"), 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.

Federal income taxes have not been provided for on a portion of the unremitted earnings of foreign subsidiaries because such earnings are intended to be permanently reinvested. The total amount of unremitted earnings of foreign subsidiaries for which we have not yet recorded federal income taxes was approximately \$100.9 million at fiscal 2009 year end. In addition to federal income taxes (which are not practicably determinable), withholding taxes of approximately \$4.5 million would be payable upon repatriation of such earnings which would result in additional foreign tax credits.

Subsequent to fiscal 2009, the "Worker, Homeownership and Business Assistance Act of 2009" was enacted on November 6, 2009. Under the Act, businesses with net operating losses for 2008 and 2009 may carry back those losses for up to five years. The Company is in the process of analyzing the impact of this new law.

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 market interest rates were to increase immediately and uniformly by 10% from levels at fiscal 2009 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. 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 fiscal 2009 year-end, the fair value of our available-for-sale debt securities was \$41.2 million, all of which was classified as short-term investments. Gross unrealized gains and losses on available-for-sale debt securities were \$19,000 and (\$2,000), respectively, at fiscal 2009 year-end. At fiscal 2008 year-end, the fair value of our available-for-sale debt securities was \$3.4 million, all of which was classified as short-term investments. Gross unrealized gains and losses on available-for-sale debt securities were \$12,000 and (\$6,000), respectively, at fiscal 2008 year-end.

Foreign currency exchange risk

We maintain operations in various countries outside of the United States and 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 and the Japanese Yen. As a result, our earnings and cash flows 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 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. 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. The risk of failure of a financial party has increased in the current economic environment.

A hypothetical 10% change in foreign currency rates would not have a material impact on our results of operations or financial position.

The following table provides information about our foreign exchange forward contracts at October 3, 2009. The table presents the weighted average contractual foreign currency exchange rates, the value of the contracts in U.S. dollars at the contract exchange rate as of the contract maturity date and fair value. The U.S. notional fair value represents the contracted amount valued at October 3, 2009 rates.

Forward contracts to sell (buy) foreign currencies for U.S. dollars (in thousands, except contract rates):

	Average Contract Rate	U.S. Notional Contract Value	U.S. Notional Fair Value
Euro	1.4606	\$(22,784)	\$(22,660)
British Pound Sterling	1.6590	\$4,726	\$4,519
Japanese Yen	91.0750	\$(415)	\$(424)
Korean Won	1,220.7000	\$2,201	\$2,292
Chinese Renminbi	6.8770	\$851	\$857

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See Item 15 (a) for an index to the Consolidated Financial Statements and Supplementary Financial Information, which are attached hereto and incorporated by reference herein. The financial statements and notes thereto can be found beginning on page 66 of this annual report.

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 done 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, 2009, utilizing the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control-Integrated Framework. Based on the assessment by management, we determined that our internal control over financial reporting was effective as of October 3, 2009. The effectiveness of our internal control over financial reporting as of October 3, 2009 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

Our internal control over financial reporting is 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. The Company's internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that the Company's receipts and expenditures are being made only in accordance with authorizations of the Company's management and directors; and
- (iii) 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.

Management, including our CEO and CFO, does not expect that the Company's 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 were no changes in our internal control over financial reporting that occurred during the quarter ended October 3, 2009 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Coherent, Inc.:

We have audited the internal control over financial reporting of Coherent, Inc. and its subsidiaries (collectively, the "Company") as of October 3, 2009, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. 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 conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel 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 the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 3, 2009, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended October 3, 2009, of the Company and our report dated December 15, 2009, expressed an unqualified opinion on those consolidated financial statements.

/s/ Deloitte & Touche LLP

San Jose, California December 15, 2009

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Information responsive to this section was filed by the Company in its Amendment No. 1 filed on Form 10-K/A on February 1, 2010; this information can be found in the Company's proxy statement which is attached hereto.

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" and then on "corporate governance."
- 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

Executive Officers

The name, age, position and a brief account of the business experience of our executive officers as of November 30, 2009 are set forth below:

Name	Age	Office Held
John R. Ambroseo, PhD	48	President and Chief Executive Officer
Helene Simonet	57	Executive Vice President and Chief Financial Officer
Luis Spinelli	61	Executive Vice President and Chief Technology Officer
Bret M. DiMarco	41	Executive Vice President, General Counsel and Corporate Secretary

John R. Ambroseo. Dr. Ambroseo has served as our President and Chief Executive Officer as well as a member of the Board of Directors since October 2002. Dr. Ambroseo served as our Chief Operating Officer from June 2001 through September 2002. Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Photonics Group from September 2000 to June 2001. From September 1997 to September 2000, Dr. Ambroseo served as our Executive Vice President and as President and General Manager of the Coherent Laser Group. From March 1997 to September 1997, Dr. Ambroseo served as our Scientific Business Unit Manager. From August 1988, when Dr. Ambroseo joined us, until March 1997, he served as a Sales Engineer, Product Marketing Manager, National Sales Manager and Director of European Operations. Dr. Ambroseo received a Bachelor degree from SUNY-College at Purchase and a PhD in Chemistry from the University of Pennsylvania.

Helene Simonet. Ms. Simonet has served as our Executive Vice President and Chief Financial Officer since April 2002. Ms. Simonet served as Vice President of Finance of our former Medical Group and Vice President of Finance, Photonics Division from December 1999 to April 2002. Prior to joining Coherent, she spent over twenty years in senior finance positions at Raychem Corporation's Division and Corporate organizations, including Vice President of Finance of the Raynet Corporation. Ms. Simonet has both Master's and Bachelor degrees from the University of Leuven, Belgium.

Luis Spinelli. Mr. Spinelli has served as our Executive Vice President and Chief Technology Officer since February 2004. Mr. Spinelli joined the Company in May 1985 and has since held various engineering and managerial positions, including Vice President, Advanced Research from April 2000 to September 2002 and Vice President, Corporate Research from September 2002

to February 2004. Mr. Spinelli has led the Advanced Research Unit from its inception in 1998, whose charter is to identify and evaluate new and emerging technologies of interest for us across a range of disciplines in the laser field. Mr. Spinelli holds a degree in Electrical Engineering from the University of Buenos Aires, Argentina with post-graduate work at the Massachusetts Institute of Technology.

Bret M. DiMarco. Mr. DiMarco has served as our Executive Vice President and General Counsel since June 2006 and 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 degree from the University of California at Irvine and a Juris Doctorate degree from the Law Center at the University of Southern California. He is also an adjunct professor of law at the University of California Hastings College of the Law, teaching corporate law and mergers & acquisitions.

ITEM 11. EXECUTIVE COMPENSATION

Information responsive to this section was filed by the Company in its Amendment No. 1 filed on Form 10-K/A on February 1, 2010; this information can be found in the Company's proxy statement which is attached hereto.

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

Information responsive to this section was filed by the Company in its Amendment No. 1 filed on Form 10-K/A on February 1, 2010; this information can be found in the Company's proxy statement which is attached hereto.

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

Information responsive to this section was filed by the Company in its Amendment No. 1 filed on Form 10-K/A on February 1, 2010; this information can be found in the Company's proxy statement which is attached hereto.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

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 years 2009 and 2008:

	2009	2008
Audit fees(1)	\$1,693,202	\$4,753,342
Audit-related fees		
Tax fees		
All other fees(2)	72,375	34,300
Total	\$1,765,577	\$4,787,642

⁽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. Includes approximately \$1,885,000 incurred during fiscal 2008 for additional services related primarily to the restatement of our consolidated financial statements for the fiscal years 1995 through 2005.

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 from the Committee to pre-approve certain additional services, and such pre-approvals are communicated to the full Committee at its next meeting. During fiscal year 2009, 100% of the services were pre-approved by the Audit Committee in accordance with this policy.

⁽²⁾ Represents the annual subscription for access to the Deloitte Accounting Research Tool, which is a searchable on-line accounting database (\$2,000) in both fiscal years, due diligence associated with our acquisition activities in fiscal 2009 and project assistance in fiscal 2008.

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 2009 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 users 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 control 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, 2009 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 Financing 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/ JOHN R. Ambroseo
 /s/ Helene Simonet

 John R. Ambroseo
 Helene Simonet

 President and Chief Executive Officer
 Executive Vice President and Chief Financial Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Coherent, Inc.:

We have audited the accompanying consolidated balance sheets of Coherent, Inc. and its subsidiaries (collectively, the "Company") as of October 3, 2009 and September 27, 2008, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended October 3, 2009. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of October 3, 2009 and September 27, 2008, and the results of its operations and its cash flows for each of the three years in the period ended October 3, 2009, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 17 to the accompanying consolidated financial statements, on September 30, 2007, the Company changed its method of accounting for uncertain tax positions in accordance with the guidance provided in Accounting Standards Codification Topic 740, "Income Taxes," formerly Financial Accounting Standards Board Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement 109".

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of October 3, 2009, based on the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 15, 2009 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP San Jose, California December 15, 2009

COHERENT, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In thousands, except par value)

	October 3, 2009	September 27, 2008
ASSETS		
Current assets:		
Cash and cash equivalents	\$199,950	\$213,826
Restricted cash	_	2,645
Short-term investments	43,685	4,268
Accounts receivable—net of allowances of \$2,147 in 2009 and \$2,494 in 2008	74,235	96,611
Inventories	97,767	120,519
Prepaid expenses and other assets	38,969	41,793
Deferred tax assets	28,164	30,121
Total current assets	482,770	509,783
Property and equipment, net	98,792	100,996
Goodwill	66,967	86,818
Intangible assets, net	19,738	27,556
Other assets	85,337	81,230
Total assets.	\$753,604	\$806,383
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term obligations	\$9	\$9
Accounts payable	21,639	26,333
Income taxes payable	1,953	7,847
Other current liabilities	62,741	79,138
Total current liabilities	86,342	113,327
Long-term obligations	6	15
Other long-term liabilities.	91,685	94,606
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock, par value \$.01:		
Authorized—500,000 shares;		
Outstanding—24,455 shares in 2009 and 24,191 shares in 2008	244	241
Additional paid-in capital	188,918	177,646
Accumulated other comprehensive income	80,269	79,089
Retained earnings	306,140	341,459
Total stockholders' equity	575,571	598,435
Total liabilities and stockholders' equity	\$753,604	\$806,383

See accompanying Notes to Consolidated Financial Statements.

COHERENT, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Year Ended		
	October 3, 2009	September 27, 2008	September 29, 2007
Net sales	\$435,882	\$599,262	\$601,153
Cost of sales	274,772	347,356	351,145
Gross profit	161,110	251,906	250,008
Operating expenses:			
Research and development	61,417	74,287	74,590
In-process research and development	_	_	2,200
Selling, general and administrative	108,098	146,376	153,945
Impairment of goodwill	19,286	_	_
Amortization of intangible assets	7,466	8,651	8,152
Total operating expenses	196,267	229,314	238,887
Income (loss) from operations	(35,157)	22,592	11,121
Other income (expense):			
Interest and dividend income	2,485	10,876	23,136
Interest expense	(228)	(152)	(10,849)
Other—net	(2,955)	3,971	5,515
Total other income (expense), net	(698)	14,695	17,802
Income (loss) before income taxes	(35,855)	37,287	28,923
Provision for (benefit from) income taxes	(536)	13,884	12,972
Net income (loss)	\$(35,319)	\$23,403	\$15,951
Net income (loss) per share:	_		_
Basic	\$(1.45)	\$0.85	\$0.51
Diluted	\$(1.45)	\$0.83	\$0.50
Shares used in computation:			
Basic	24,281	27,505	31,398
Diluted	24,281	28,054	32,024

See accompanying Notes to Consolidated Financial Statements.

COHERENT, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Three Years in the Period Ended October 3, 2009

(In thousands)

	Common Stock Shares	Common Stock Par Value	Add. Paid- in Capital	Notes Rec. From Stock Sales	Accum. Other Comp. Income	Retained Earnings	Total
Balances, September 30, 2006	31,412	\$311	\$367,290	\$(324)	\$46,693	\$303,534	\$717,504
Components of comprehensive income:							
Net income.	_	_	_	_	_	15,951	15,951
Translation adjustment, net of tax	_	_	_	_	23,755	_	23,755
Unrealized gain on available for sale securities,							
net of tax	_	_	_	_	187	_	187
Net gain on derivative instruments, net of tax	_	_	_	_	37	_	37
Total comprehensive income							39,930
Amortization, issuance and forfeitures of restricted stock	1	_	(225)	_	_	_	(225)
Sales of shares under Employee Stock Option Plan	52	1	1,260	_	_	_	1,261
Sales of shares under Employee Stock Purchase Plan	87	1	2,521	_	_	_	2,522
Stock-based compensation	_	_	9,648	_	_	_	9,648
Tax benefit from employee stock options	_	_	22	_	_	_	22
Collection of notes receivable.				324	_		324
Balances, September 29, 2007	31,552	313	380,516	_	70,672	319,485	770,986
Components of comprehensive income:	,		,		,	,	,
Net income.	_	_	_	_	_	23,403	23,403
Translation adjustment, net of tax	_	_	_	_	8,247	_	8,247
Unrealized gain on available for sale securities,					Ź		,
net of tax	_	_	_	_	165	_	165
Net gain on derivative instruments, net of tax	_	_	_	_	5	_	5
Total comprehensive income							31,820
Amortization, issuance and forfeitures of restricted stock	(32)	1	(884)	_	_	_	(883)
Sales of shares under Employee Stock Option Plan	643	7	16,501	_	_	_	16,508
Stock-based compensation	_	_	8,982	_	_	_	8,982
Tax benefit from employee stock options	_	_	665	_	_	_	665
Repurchases of Common Stock	(7,972)	(80)	(228,134)	_	_	_	(228,214)
Cumulative effect of adoption of tax accounting standard	_	_	_	_	_	(1,429)	(1,429)
Balances, September 27, 2008	24,191	241	177,646		79,089	341,459	598,435
Components of comprehensive income:	, -		,-		. ,	, , , , ,	,
Net loss	_	_	_	_	_	(35,319)	(35,319)
Translation adjustment, net of tax	_	_	_	_	1,156	_	1,156
Unrealized gain on available for sale securities,					1,100		1,100
net of tax	_	_	_	_	16	_	16
Net gain on derivative instruments, net of tax	_	_	_	_	8	_	8
Total comprehensive loss							(34,139)
Amortization, issuance and forfeitures of restricted stock	31	1	(725)	_	_	_	(724)
Sales of shares under Employee Stock Option Plan	9	_	226	_	_	_	226
Sales of shares under Employee Stock Purchase Plan	224	2	4,445	_	_	_	4,447
Stock-based compensation	_	_	7,326	_	_	_	7,326
Balances, October 3, 2009	24,455	\$244	\$188,918	<u>\$—</u>	\$80,269	\$306,140	\$575,571

See accompanying Notes to Consolidated Financial Statements.

COHERENT, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended		
	October 3, 2009	September 27, 2008	September 29, 2007
Cash flows from operating activities:			
Net income (loss)	\$(35,319)	\$23,403	\$15,951
Adjustments to reconcile net income to net cash provided by operating activities:			
Purchased in-process research and development	_	_	2,200
Non-cash restructuring and other charges (recoveries)	(356)	3,111	(128)
Depreciation and amortization	19,194	23,319	25,822
Amortization of intangible assets	7,466	8,651	8,152
Impairment of goodwill	19,286		
Stock-based compensation.	7,415	8,809	9,937
Excess tax benefit from stock-based compensation arrangements	(9)	(749)	(77)
Tax benefit from employee stock options	_	665	22
Deferred income taxes.	(12,224)	(1,642)	2,037
Loss on disposal of property and equipment	594	417	10,722
Other non-cash expense.	128	208	506
Non-cash impact of sale of CIOL	_	_	(1,993)
Non-cash write-off of Excel acquisition cost	_	_	491
Amortization of bond issue costs	_	_	5,139
Changes in assets and liabilities, net of effect of acquisitions:			,
Accounts receivable.	24,854	9,049	12,211
Inventories	21,412	(6,491)	(8,377)
Prepaid expenses and other assets.	2,302	7,019	(9,751)
Other assets	6,245	2,902	(5,208)
Accounts payable	(4,172)	(1,085)	(1,683)
Income taxes payable/receivable.	1,481	1,717	(3,347)
Other current liabilities	(13,848)	(8,837)	3,356
Other long-term liabilities	(5,400)	(2,104)	637
Net cash provided by operating activities	39,049	68,362	66,619
Cash flows from investing activities:			
Purchases of property and equipment	(21,627)	(22,612)	(21,693)
Proceeds from dispositions of property and equipment.	1,604	12,863	24,630
Purchases of available-for-sale securities	(106,856)	(109,846)	(339,107)
Proceeds from sales and maturities of available-for-sale securities	67,435	151,362	341,978
Acquisition of businesses, net of cash acquired	07,433	131,302	(14,228)
Change in restricted cash.	2,521	(109)	(14,228)
•	2,521	(109)	
Premiums paid for life insurance contracts Proceeds from sale of CIOL	_		(2,800)
	(35)	6,519	
Other-net.	(25)		3
Net cash provided by (used in) investing activities	(56,948)	38,177	(11,212)

(continued)

	Year Ended			
	October 3, 2009	September 27, 2008	September 29, 2007	
Cash flows from financing activities:				
Short-term borrowings.	\$8	\$371	\$	
Short-term repayments	(8)	(370)	_	
Long-term debt borrowings.	_	_	(200)	
Long-term debt repayments	_	_	(200,002)	
Cash overdrafts decrease	(470)	(855)	(1,854)	
Repayments of capital lease obligations	(8)	(9)	(7)	
Repurchase of common stock	_	(228,214)	_	
Issuance of common stock under employee stock option and purchase plans	4,674	16,509	3,783	
Excess tax benefits from stock-based compensation arrangements	9	749	77	
Collection of notes receivable from stock sales			324	
Net cash provided by (used in) financing activities	4,205	(211,819)	(197,879)	
Effect of exchange rate changes on cash and cash equivalents	(182)	3,179	13,168	
Net decrease in cash and cash equivalents	(13,876)	(102,101)	(129,304)	
Cash and cash equivalents, beginning of year	213,826	315,927	445,231	
Cash and cash equivalents, end of year	\$199,950	\$213,826	\$315,927	
Supplemental disclosure of cash flow information:				
Cash paid during the year for:				
Interest	\$194	\$577	\$6,397	
Income taxes	\$22,024	\$18,781	\$17,038	
Cash received during the year for:				
Income taxes	\$10,333	\$4,213	\$1,253	
Noncash investing and financing activities:				
Unpaid property and equipment	\$696	\$1,052	\$1,584	

(concluded)

See accompanying Notes to Consolidated Financial Statements

COHERENT, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS

Founded in 1966, Coherent, Inc. provides photonics-based solutions in a broad range of commercial and scientific research applications. We design, manufacture, service and market lasers and related accessories for a diverse group of customers. Headquartered in Santa Clara, California, we have 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 2009, 2008 and 2007 ended on October 3, September 27, and September 29, respectively, and are referred to in these financial statements as fiscal 2009, fiscal 2008, and fiscal 2007 for convenience. Fiscal 2009 included 53 weeks; fiscal 2008 and 2007 included 52 weeks. The fiscal years of the majority 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.

FASB Codification

We follow accounting standards set by the Financial Accounting Standards Board, commonly referred to as the "FASB." The FASB sets generally accepted accounting principles ("GAAP") that we follow to ensure we consistently report our financial condition, results of operations, and cash flows. Over the years, the FASB and other designated GAAP-setting bodies, have issued standards in the form of FASB Statements, Interpretations, FASB Staff Positions, EITF consensuses, AICPA Statements of Position, etc.

The FASB embarked on a revised standard-setting process in 2004 that culminated in the release on July 1, 2009, of the FASB Accounting Standards Codification,TM ("ASC"), also referred to as the Codification. The Codification does not change how we account for our transactions or the nature of related disclosures made. However, when referring to guidance issued by the FASB, we refer to topics in the ASC rather than by Statement Number. The above change was made effective by the FASB for periods ending on or after September 15, 2009. We have updated references to GAAP in this Annual Report on Form 10-K to reflect the guidance in the Codification.

Use of Estimates

The preparation of consolidated financial statements in conformity with 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 majority-owned subsidiaries (collectively, "the Company", "we", "our", or "Coherent"). Intercompany balances and transactions have been eliminated. Investments in business entities in which we do not have control, but have the ability to exercise significant influence over operating and financial policies (generally 20-50% ownership) are accounted for by the equity method.

In preparing the accompanying consolidated financial statements, we have reviewed, as deemed necessary by our management, events that have occurred after October 3, 2009, up until the date the consolidated financial statements were available for issuance, December 15, 2009.

Fair Value of Financial Instruments

The carrying amounts of certain of our financial instruments including cash and cash equivalents, 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 related to our deferred compensation plans, which are carried at fair value. The recorded carrying amount of our long-term obligations approximates fair value at fiscal 2009 year-end. Foreign exchange contracts are stated at fair value based on prevailing financial market information.

Cash Equivalents

All highly liquid investments with maturities of three months or less at the time of purchase are classified as cash equivalents.

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 2009 year-end, the majority of our short-term investments are in bank certificates of deposit, federal agency obligations and commercial paper. Cash equivalents and short-term investments are maintained with several financial institutions and may exceed the amount of insurance provided on such balances. 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. We maintain reserves for potential credit losses. Our products are broadly distributed and there were no customers who accounted for more than 10% of accounts receivable at fiscal 2009 or fiscal 2008 year-end.

Accounts Receivable Allowances

Accounts receivable allowances reflect our best estimate of probable losses inherent in our accounts receivable balance. 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 year-end			
	2009	2008	2007	
Beginning balance	\$2,494	\$2,918	\$3,275	
Additions charged to expenses	1,974	1,246	1,698	
Deductions from reserves	(2,321)	(1,670)	(2,055)	
Ending balance	\$2,147	\$2,494	\$2,918	

Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market. Inventories are as follows (in thousands):

	Fiscal year-end	
	2009	2008
Purchased parts and assemblies	\$30,945	\$36,919
Work-in-process	30,680	46,128
Finished goods	36,142	37,472
Inventories	\$97,767	\$120,519

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 (in thousands):

	Fiscal year-end		
	2009	2008	Useful Life
Land	\$6,281	\$6,289	
Buildings and improvements	71,159	68,120	5-40 years
Equipment, furniture and fixtures	184,282	199,099	3-10 years
Leasehold improvements	16,525	14,513	Lesser of useful life or terms of leases
	278,247	288,021	
Accumulated depreciation and amortization	(179,455)	(187,025)	
Property and equipment, net	\$98,792	\$100,996	

In September 2007, we sold our Condensa building in Santa Clara, California for approximately \$24.8 million, resulting in a capital gain of approximately \$3.6 million. In the third quarter of fiscal 2007, as part of a plan to consolidate facilities, we moved our operations from that facility to other existing facilities and classified the property as held for sale. The net book value of the land was approximately \$12.9 million and the net book value of the building and improvements was approximately \$8.3 million. In September 2007, as part of a plan to consolidate facilities, we also sold our Auburn campus in Auburn, California, for approximately \$9.8 million and incurred related expenses of \$0.7 million, resulting in a loss of approximately \$12.6 million. The net book value of the building and improvements was approximately \$21.7 million. We did not recognize any tax benefit on the net loss of \$9.0 million generated by the Condensa and Auburn transactions since it is not considered realizable.

Asset Retirement Obligations

The fair value 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 Finland site. We estimated that as of fiscal 2009 year-end, gross expected future cash flows of \$2.1 million would be required to fulfill these obligations.

The following table reconciles changes in our asset retirement liability for fiscal 2009 and 2008 (in thousands):

Asset retirement liability as of September 29, 2007	\$1,256
Adjustment to asset retirement obligations recognized.	54
Accretion recognized	84
Changes due to foreign currency exchange	70
Asset retirement liability as of September 27, 2008	1,464
Adjustment to asset retirement obligations recognized	36
Accretion recognized	112
Changes due to foreign currency exchange	67
Asset retirement liability as of October 3, 2009	\$1,679

At October 3, 2009, \$337,000 of asset retirement liability is reported in other current liabilities and \$1,342,000 is reported in other long-term liabilities on our consolidated balance sheets. At September 27, 2008, the asset retirement liability is reported in other long-term liabilities 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.

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 is tested for impairment by comparing the respective fair value with the respective carrying value of the reporting unit. Fair value is determined using a weighting of the Income (discounted cash flow), Market and Transaction approach valuation methodologies. Absent any impairment indicators, we perform our annual impairment tests at the beginning of the fourth quarter of each fiscal year using 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.

Intangible Assets

Intangible assets, including acquired existing technology, customer lists, trade name, non-compete agreements, patents and order backlog are amortized on a straight-line basis over estimated useful lives of one year to fifteen years.

Warranty Reserves

We provide warranties on certain 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 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 2009, 2008 and 2007 were as follows (in thousands):

		Fiscal	
	2009	2008	2007
Beginning balance	\$13,214	\$13,660	\$11,462
Additions related to current period sales	12,573	21,872	21,423
Warranty costs incurred in the current period	(15,461)	(22,287)	(20,157)
Accruals resulting from acquisitions			247
Adjustments to accruals related to prior period sales	(115)	(31)	685
Ending balance	\$10,211	\$13,214	\$13,660

Revenue Recognition

We recognize revenue when all four revenue recognition criteria have been met: persuasive evidence of an arrangement exists, the product has been delivered or the service has been rendered, the price is fixed or determinable and collection is reasonably assured. Revenue from product sales is recorded when all of the foregoing conditions are met and risk of loss and title passes to the customer. Sales to customers are generally not subject to any price protection or return rights.

The vast majority of our sales are made to original equipment manufacturers ("OEMs"), distributors, resellers and endusers in the non-scientific market. Sales made to these customers do not require installation of the products by us and are not subject to other post-delivery obligations, except in occasional instances where we have agreed to perform installation or provide training. In those instances, we defer revenue related to installation services or training until these services have been rendered. We allocate revenue from multiple element arrangements to the various elements based upon relative fair values.

Our sales to distributors, resellers and end-user customers typically do not have customer acceptance provisions and only certain of our sales to OEM customers 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 other than published specifications, (1) the products are tested and accepted by the customer at our site or by the customer's acceptance of the results of our testing program prior to shipment to the customer, or (2) the revenue is deferred until customer acceptance occurs.

Sales to end-users in the scientific market typically require installation and, thus, involve post-delivery obligations; however, our post-delivery installation obligations are not essential to the functionality of our products. We defer revenue related to installation services until completion of these services.

For most products, training is not provided; therefore, no post-delivery training obligation exists. However, when training is provided to our customers, it is typically priced separately and is recognized as revenue after these services have been provided.

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 credit to research and development cost. Amounts offset against research and development costs were not material in any of the periods presented.

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.

Derivatives

U.S. GAAP requires that all derivatives, whether designated in hedging relationships or not, be recorded on the balance sheet at fair value. If the derivative is designated as a fair value hedge, the changes in the fair value of the derivative and of the hedged item attributable to the hedged risk are recognized in earnings. If the derivative is designated as a cash flow hedge, the effective portions of the changes in the fair value of the derivative are recorded in OCI and are recognized in the income statement when the hedged item affects earnings. Ineffective portions of changes in the fair value of cash flow hedges are recognized in other income (expense).

Our objective of holding derivatives is to minimize the risks of foreign currency fluctuation by using the most effective methods to eliminate or reduce the impact of these exposures. Principal currencies hedged include the Euro, Japanese Yen, British Pound, Korean Won and Chinese Renminbi.

For foreign currency forward contracts, hedge effectiveness is measured by comparing the cumulative change in the hedge contract with the cumulative change in the hedged item, both of which are based on forward rates. For foreign currency option contracts, hedge effectiveness is asserted when the critical elements representing the total changes in the option's cash flows continue to match the related elements of the hedged forecasted transaction. Should discrepancies arise, effectiveness is measured by comparing the change in option value and the change in value of a hypothetical derivative mirroring the critical elements of the forecasted transaction.

Forwards not designated as hedging instruments are also used to hedge the impact of the variability in exchange rates on accounts receivable and collections denominated in certain foreign currencies. Our forward contracts have maturities of two months or less and changes in fair value of these derivatives are recognized in other income (expense).

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 and is presented in our Consolidated Statements of Stockholders' Equity and in Note 15, "Accumulated Other Comprehensive Income (Loss)."

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 contracts, using the treasury stock method.

The following table presents information necessary to calculate basic and diluted earnings (loss) per share (in thousands, except per share data):

		Fiscal	
	2009	2008	2007
Weighted average shares outstanding—basic(1)	24,281	27,505	31,398
Dilutive effect of employee awards		549	626
Weighted average shares outstanding—diluted	24,281	28,054	32,024
Net income (loss)	\$(35,319)	\$23,403	\$15,951
Net income (loss)—basic	\$(1.45)	\$0.85	\$0.51
Net income (loss)—diluted.	\$(1.45)	\$0.83	\$0.50

⁽¹⁾ Net of restricted stock

As the Company incurred a net loss for fiscal 2009, all potentially dilutive securities from stock options, employee stock purchase plan and restricted stock awards have been excluded from the diluted net loss per share computation as their effects were deemed anti-dilutive. A total of 2,265,373 and 1,369,385 potentially dilutive securities have been excluded from the dilutive share calculation for fiscal 2008 and 2007, respectively, as their effect was anti-dilutive.

In September 2004, the Emerging Issues Task Force reached a final consensus that contingently convertible debt should be treated as convertible debt and included in the calculation of diluted earnings per share ("EPS"). The assumed proceeds from our previous \$200.0 million 2.75% convertible subordinated notes (repaid in 2007) under the treasury stock method were calculated by subtracting the aggregate weighted- average conversion price from the average market price of the shares related to the contingently convertible debt. As the market price for our shares did not reach the conversion price at any point during fiscal 2007 while the contingently convertible debt was outstanding, there was no dilutive effect in our diluted EPS calculation under the treasury stock method. Therefore we did not include any shares related to the convertible subordinated notes in our calculation of diluted earnings per share for 2007.

Stock-Based Compensation

We account for stock-based compensation using the fair value of the awards granted. We estimate the fair value of stock options granted using the Black-Scholes Merton model. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. We amortize the fair value of stock options on a straight-line basis over the requisite service periods of the awards, which are generally the vesting periods. We value restricted stock units using the intrinsic value method. We amortize the value of restricted stock units on a straight-line basis over the restriction period. See Note 14 "Employee Stock Option 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.

Advertising Costs

Advertising costs are expensed as incurred and were \$2.2 million, \$2.3 million and \$2.6 million in fiscal 2009, fiscal 2008 and fiscal 2007, respectively.

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 allowance for the deferred tax asset would be charged to income in the period such determination was made.

Federal income taxes have not been provided for on a portion of the unremitted earnings of foreign subsidiaries because such earnings are intended to be permanently reinvested. The total amount of unremitted earnings of foreign subsidiaries for which we have not yet recorded federal income taxes was approximately \$100.9 million at fiscal 2009 year end. In addition to federal income taxes (which are not practicably determinable), withholding taxes of approximately \$4.5 million would be payable upon repatriation of such earnings which would result in additional foreign tax credits.

Adoption of New Accounting Pronouncement

In December 2007, the FASB issued new disclosure requirements regarding collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. We adopted ASC Subtopic 808-10, "Collaborative Arrangements," (formerly Emerging Issues Task Force ("EITF") Consensus for Issue No. 07-1, "Accounting for Collaborative Arrangements) for our fiscal year beginning September 28, 2008. The adoption of this standard did not have a material impact on our consolidated financial position, results of operations and cash flows.

In September 2006, the FASB issued guidance on fair value measurements and disclosures, ASC 820, "Fair Value Measurements and Disclosures" (formerly Statement of Financial Standards ("SFAS") No. 157, "Fair Value Measurements"). The guidance defined fair value, established a framework for measuring fair value in accordance with GAAP, and expanded disclosures about fair value measurements. We adopted this guidance in our first quarter of fiscal 2009 for financial assets and financial liabilities and the adoption did not have a significant impact on our consolidated financial position, results of operations and cash flows.

In March 2008, the FASB issued new disclosure requirements regarding derivative instruments and hedging activities, ASC 815, "Derivatives and Hedging" (formerly SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133"). This statement requires us to provide enhanced disclosures about (a) how and why we use derivative instruments, (b) how derivative instruments and related hedged items are accounted for and (c) how derivative instruments and related hedged items affect our financial position, financial performance, and cash flows. We adopted these new disclosure requirements in our second quarter of fiscal 2009. The adoption did not have a material impact on our consolidated financial position, results of operations and cash flows.

In April 2009, the FASB issued additional requirements regarding interim disclosures about the fair value of financial instruments which were previously only disclosed on an annual basis, ASC Subtopic 825-65 "Financial Instruments—Transition and Open Effective Date Information" (formerly FSP FAS 107-1 & APB 28-1, "Interim Disclosures about Fair Value of Financial Instruments"). Entities are now required to disclose the fair value of financial instruments which are not recorded at fair value in the financial statements in both their interim and annual financial statements. We adopted this guidance in our third quarter of fiscal 2009 and it did not have a significant impact on our consolidated financial position, results of operations and cash flows.

In April 2009, the FASB issued guidance on determining fair value when the volume and level of activity for an asset or liability has significantly decreased, and in identifying transactions that are not orderly, codified in ASC Subtopic 820-10 "Fair Value Measurements and Disclosures" (formerly FSP FAS 157-4, "Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly"). This also includes guidance on identifying circumstances that indicate a transaction is not orderly. Based on the guidance, if an entity determines that the level of activity for an asset or liability has significantly decreased and that a transaction is not orderly, further analysis of transactions or quoted prices is needed, and a significant adjustment to the transaction or quoted prices may be necessary to estimate fair value. We adopted this guidance in our third quarter of fiscal 2009 and it did not have a significant impact on our consolidated financial position, results of operations and cash flows.

In April 2009, the FASB issued guidance, codified in ASC 320-10-65 "Investments—Debt and Equity Securities" (formerly FSP No. 115-2, "Recognition and Presentation of Other-Than-Temporary Impairments"), which amended existing guidance on determining whether an impairment for investments in debt securities is other than temporary to make the guidance more

operational and to improve the presentation and disclosure of other-than-temporary impairments on debt and equity securities in the financial statements. The guidance does not amend existing recognition and measurement guidance related to other-than-temporary impairments of equity securities. We adopted the guidance in our third quarter of fiscal 2009 and it did not have a significant impact on our consolidated financial position, results of operations and cash flows.

In May 2009, the FASB issued authoritative guidance establishing general standards of accounting and disclosure for events that occur subsequent to the balance sheet date but before financial statements are issued or are available to be issued. This guidance, codified in ASC 855-10 "Subsequent Events" (formerly SFAS No. 165, "Subsequent Events") sets forth: 1) the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements; 2) the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements; and 3) the disclosures that an entity should make about events or transactions that occurred after the balance sheet date. We adopted this guidance for the quarterly period ending July 4, 2009, and the adoption had no impact on our consolidated financial position, results of operations and cash flows.

Recently Issued Accounting Pronouncements

In December 2007 the FASB revised the authoritative guidance for business combinations. As codified under ASC 805 "Business Combinations" (formerly SFAS No. 141(revised 2007), "Business Combinations"), the revised guidance retains the fundamental requirements of the original pronouncement requiring that the purchase method be used for all business combinations, defines the acquirer as the entity that obtains control of one or more businesses in the business combination, establishes the acquisition date as the date that the acquirer achieves control and requires the acquirer to recognize the assets acquired, liabilities assumed and any noncontrolling interest at their fair values as of the acquisition date. The revised guidance also requires that acquisition-related costs be recognized separately from the acquisition and recorded as an expense. This guidance will be effective for us for acquisitions after the beginning of our fiscal year 2010.

In February 2008, the FASB issued guidance which delayed the effective date regarding fair value measurements and disclosures of nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis. The fair value guidance for non financial assets and liabilities is effective for us for our fiscal year beginning October 4, 2009. We do not expect that the adoption of this update, as codified in ASC 820-10 "Fair Value Measurements and Disclosures" (formerly FSP 157-2, "Effective Date of FASB Statement No. 157") will have a significant impact on our consolidated financial position, results of operations and cash flows.

In April 2008, the FASB issued new requirements regarding the determination of the useful lives of intangible assets. As codified in ASC 350-30 "Intangibles—Goodwill and Other" (formerly FSP FAS No. 142-3, "Determination of the Useful Life of Intangible Assets"), this guidance amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible; an entity needs to consider its own historical experience adjusted for entity-specific factors. In the absence of that experience, an entity shall consider the assumptions that market participants would use about renewal or extension options. The intent of this guidance is to improve the consistency between the useful life of a recognized intangible asset and the period of expected cash flows used to measure the fair value of the asset. The new guidance is effective for our fiscal year beginning October 4, 2009 and will be applied prospectively to intangible assets acquired after the effective date. We will evaluate the potential impact of this guidance on intangibles acquired on a prospective basis.

In April 2009, the FASB issued an amendment to the revised business combination guidance regarding the accounting for assets acquired and liabilities assumed in a business combination that arise from contingencies, ASC 805, "Business Combinations" (formerly FSP FAS 141(R)-1, "Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies"). The requirements of this amended guidance carry forward without significant revision the guidance on contingencies which existed prior to January 1, 2009. Assets acquired and liabilities assumed in a business combination that arise from contingencies are recognized at fair value if fair value can be reasonably estimated. If fair value cannot be reasonably estimated during the measurement period, the contingent asset or liability would be recognized in accordance with the guidance on contingencies. Further, this statement eliminated the specific subsequent accounting guidance for contingent assets and liabilities resulting from business combinations without significantly revising previous guidance related to business combinations. This guidance is effective for us for acquisitions completed after the beginning of our fiscal year 2010.

In June 2009, the FASB issued amendments to the accounting rules for variable interest entities (VIEs) and for transfers of financial assets, codified in ASC 810-10 "Consolidations" (formerly SFAS No. 166, "Accounting for Transfers of Financial Assets" and SFAS No.167, "Amendments to FASB Interpretation No. 46(R)"). The new guidance eliminates the quantitative approach previously required for determining the primary beneficiary of a variable interest entity and requires ongoing qualitative

reassessments of whether an enterprise is the primary beneficiary. The determination of whether a company is required to consolidate an entity is based on, among other things, an entity's purpose and design and a company's ability to direct the activities of the entity that most significantly impact the entity's economic performance. In addition, qualifying special purpose entities ("QSPE") are no longer exempt from consolidation under the amended guidance. The amendments also limit the circumstances in which a financial asset, or a portion of a financial asset, should be derecognized when the transferor has not transferred the entire original financial asset to an entity that is not consolidated with the transferor in the financial statements being presented, and/or when the transferor has continuing involvement with the transferred financial asset. These pronouncements are effective for our first quarter of fiscal year 2011. Earlier application is prohibited. We are currently evaluating the potential impact, if any, of the adoption of these pronouncements on our consolidated financial position, results of operations and cash flows.

In November 2008, the FASB issued a new accounting standard regarding the accounting of defensive intangible assets, codified in ASC 350-30 "Intangibles and Goodwill—Other" (formerly EITF No. 08-7, "Accounting for Defensive Intangible Assets"), which clarifies accounting for defensive intangible assets subsequent to initial measurement. It applies to acquired intangible assets which an entity has no intention of actively using, or intends to discontinue use of, the intangible asset but holds it to prevent others from obtaining access to it (i.e., a defensive intangible asset). Under this update, a consensus was reached that an acquired defensive asset should be accounted for as a separate unit of accounting (i.e., an asset separate from other assets of the acquirer); and the useful life assigned to an acquired defensive asset should be based on the period during which the asset would diminish in value. This guidance is effective for us for acquisitions completed after the beginning of our fiscal year 2010.

In September 2009, the FASB issued Accounting Standards Update ("ASU") No. 2009-13—Revenue Recognition (Topic 605): Multiple-Deliverable Revenue Arrangements (formerly EITF Issue No. 08-1 "Revenue Arrangements with Multiple Deliverables"). This standard modifies the revenue recognition guidance for arrangements that involve the delivery of multiple elements, such as product, software, services or support, to a customer at different times as part of a single revenue generating transaction. This standard provides principles and application guidance to determine whether multiple deliverables exist, how the individual deliverables should be separated and how to allocate the revenue in the arrangement among those separate deliverables. The standard also expands the disclosure requirements for multiple deliverable revenue arrangements.

This Accounting Standards Update should be applied on a prospective basis for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, with earlier application permitted. Alternatively, an entity can elect to adopt this standard on a retrospective basis. We are currently evaluating the potential impact and timing of the adoption of this update on our consolidated financial position, results of operations and cash flows.

3. RESTRUCTURING ACTIVITIES

On April 16, 2008, we announced that we entered into an agreement to sell certain assets of our Auburn Optics ("Auburn") manufacturing operation to Research Electro-Optics, Inc. ("REO"), a privately held optics manufacturing and technology company. We also entered into a strategic supply agreement with REO. REO is providing optical manufacturing capabilities for us, including fabrication and coating of optical components. The transition of the optics manufacturing assets from Auburn to REO was completed in fiscal 2009. The transition has resulted in charges primarily for employee terminations, supplier qualification, moving costs for related equipment, and other exit related costs associated with a plan approved by management.

During fiscal 2008, we consolidated our German DPSS manufacturing into our Lübeck, Germany site. The transfer was completed in our fourth quarter of fiscal 2008. On October 13, 2008, we announced the consolidation of the remainder of our Munich facility into our Göttingen site. The transfer was completed in our third quarter of fiscal 2009. The consolidation and transfers have resulted in charges primarily for employee terminations, other exit related costs associated with a plan approved by management and a grant repayment liability.

During the second quarter of fiscal 2009, we announced our plans to close our facilities in Tampere, Finland and St. Louis, Missouri. The closure of our St. Louis site was completed in the fourth quarter of fiscal 2009. The closure of our Finland site is scheduled for completion by the end of fiscal 2010. These closure plans have resulted in charges primarily for employee termination and other exit related costs associated with a plan approved by management.

Restructuring charges in fiscal 2009 and 2008 are recorded in cost of sales, research and development and selling, general and administrative expenses in our consolidated statements of operations.

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 2009 and 2008 (in thousands):

	Severance Related	Facilities Related Charges	Other Restructuring Costs	Total
Balance, September 29, 2007	\$	\$476	\$	\$476
Provision	3,654	75	2,075	5,804
Payments and other	(1,073)	(532)	(1,088)	(2,693)
Balance, September 27, 2008	2,581	19	987	3,587
Provision	8,302	3,508	3,627	15,437
Payments and other	(10,395)	(3,170)	(3,807)	(17,372)
Balance, October 3, 2009	\$488	\$357	\$807	\$1,652

The current year severance related costs are primarily comprised of severance pay, outplacement services, medical and other related benefits for employees being terminated due to the transition of activities out of Auburn, California; Munich, Germany; St. Louis, Missouri and Tampere, Finland. The remaining severance related restructuring accrual balance of approximately \$0.5 million at October 3, 2009 is expected to result in cash expenditures through the fourth quarter of fiscal 2010. The other restructuring costs are primarily for a grant repayment liability and other exit related costs associated with a plan approved by management.

4. BUSINESS COMBINATIONS

Nuvonyx, Inc.

On April 24, 2007, we acquired Nuvonyx, Inc., a technology leader in high-power laser diode components, arrays, and industrial laser systems for materials processing and defense applications for approximately \$14.0 million in cash, net of acquisition costs of \$0.3 million. Nuvonyx produces high power arrays with powers in excess of 50 Kilowatts through its proprietary cooling and stacking technologies. The industrial laser systems are used for cladding and hardening of metals, joining materials, and other materials processing applications. We have accounted for the acquisition of Nuvonyx's assets as a business combination and the operating results of Nuvonyx have been included in our consolidated financial statements from the date of acquisition.

Our allocation of the purchase price is as follows (in thousands):

Tangible assets	\$5,345 6,882
In-process research and development (IPR&D)	2,200
Intangible assets:	
Existing technology	1,800
Customer lists	900
Non-compete agreements	140
Backlog	60
Trade name	20
Deferred tax liabilities	(1,256)
Liabilities assumed	
Total	\$14,265

The goodwill recognized from this acquisition resulted primarily from anticipated increases in market share and synergies of combining this entity and was included in our Commercial Lasers and Components ("CLC") segment. None of the goodwill from this purchase is deductible for tax purposes. The identifiable intangible assets are being amortized over their respective useful lives of one to five years. During the first quarter of fiscal 2009, based on a decline in our stock price and other economic indicators, we concluded that we needed to review our goodwill balance for potential impairment. Based on that analysis, the goodwill for our CLC segment, including the goodwill associated with this acquisition, was determined to be impaired and written off in the first quarter of fiscal 2009. See Note 8 "Goodwill and Intangible Assets" for more information.

At the date of acquisition, we immediately charged \$2.2 million to expense, representing purchased IPR&D related to two development projects that had not yet reached technological feasibility and had, in management's opinion, no alternative future use. The assigned value was determined by estimating the costs to develop the acquired in-process technology into commercially viable products, estimating the net cash flows from such project, and discounting the net cash flows back to its present value. Separate projected cash flows were prepared for both the existing, as well as the in-process projects. The key assumptions used in the valuation include, among others, the expected completion date of the in-process project identified as of the acquisition date, the estimated costs to complete the project, revenue contribution and expense projection assuming the resulting products have entered the market, and the discount rate based on the risks associated with the development life cycle of the in-process technology acquired. The discount rate used in the present value calculations was obtained from a weighted-average cost of capital analysis, adjusted upward to account for the inherent uncertainties surrounding the successful development of the in-process research and development, the expected profitability level of such technology, and the uncertainty of technological advances that could potentially impact the estimates. Projected net cash flows were based on estimates of revenue and operating profit (loss) of the project. At October 3, 2009, one project remains on hold and the other is expected to become commercially viable in the first quarter of fiscal 2010.

Unaudited pro forma results of operations had the acquisition taken place at the beginning of fiscal 2007 would have resulted in net sales of \$606.1 million, net income of \$16.4 million, and net income per basic and diluted share of \$0.52 and \$0.51, respectively, for fiscal 2007. These unaudited pro forma results are not necessarily indicative of the results that actually would have been obtained had the acquisition been in effect for the periods described or that may be obtained in the future.

Lambda Physik

At fiscal 2008 year-end, we had \$2.6 million remaining in an escrow account to be applied towards remaining close out costs for the acquisition of our Lambda Physik subsidiary which was included in current restricted cash on our consolidated balance sheet for that period. We completed the close out activities during the first quarter of fiscal 2009, and have no restricted funds remaining on our balance sheet as of October 3, 2009.

5. FAIR VALUE OF CASH EQUIVALENTS AND MARKETABLE SECURITIES

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. Level 1 valuations are obtained from real-time quotes for transactions in active exchange markets involving identical assets. Level 2 valuations are obtained from quoted market prices in active markets involving similar assets. Level 3 valuations would be based on unobservable inputs to a valuation model and include our own data about assumptions market participants would use in pricing the asset or liability based on the best information available under the circumstances; as of October 3, 2009, we did not have any assets or liabilities valued based on Level 3 valuations.

Financial assets and liabilities measured at fair value as of October 3, 2009 are summarized below (in thousands):

	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Total Fair Value
	(Level 1)	(Level 2)	
Money market fund deposits(1)	\$16,481	\$	\$16,481
Certificates of deposit(2)	_	143,886	143,886
U.S. Treasury and agency obligations(3)	_	47,770	47,770
Corporate notes and obligations(4)	_	51	51
Commercial paper(5)	_	8,598	8,598
Foreign currency contracts(6)		(4)	(4)
Total net assets measured at fair value.	\$16,481	\$200,301	\$216,782

⁽¹⁾ Included in cash and cash equivalents on the Consolidated Balance Sheet.

⁽²⁾ Includes \$141,423 recorded in cash and cash equivalents and \$2,463 recorded in short-term investments on the Consolidated Balance Sheet.

⁽³⁾ Includes \$9,599 recorded in cash and cash equivalents and \$38,171 recorded in short-term investments on the Consolidated Balance Sheet.

- (4) Included in short-term investments on the Consolidated Balance Sheet.
- (5) Includes \$5,598 recorded in cash and cash equivalents and \$3,000 recorded in short-term investments on the Consolidated Balance Sheet.
- (6) Includes \$217 recorded in prepaid expenses and other assets and \$221 recorded in other current liabilities on the Consolidated Balance Sheet.

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 other comprehensive income ("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 2009 Year-end			
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$199,949	\$1	<u> </u>	\$199,950
Short-term investments:				
Available-for-sale securities:				
Commercial paper	\$3,000	\$	\$	\$3,000
Certificates of deposit	2,451	12	_	2,463
U.S. Treasury and agency obligations	38,152	19	_	38,171
Corporate notes and obligations	53	_	(2)	51
Total short-term investments.	\$43,656	\$31	\$(2)	\$43,685
		Fiscal 200	8 Year-end	
	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash and cash equivalents	\$216,474	\$2	\$(5)	\$216,471
Less: restricted cash				(2,645)
				\$213,826
Short-term investments:				
Available-for-sale securities:				
Commercial paper	\$1,496	\$	\$—	\$1,496
Certificates of deposit	900	5	_	905
U.S. Treasury and agency obligations	607	5	_	612
Corporate notes and obligations	1,254	7	(6)	1,255
Total short-term investments.	\$4,257	\$17	\$(6)	\$4,268

At fiscal 2008 year-end, \$2.6 million of cash and cash equivalents were restricted for remaining close out costs associated with our purchase of the remaining outstanding shares of Lambda Physik (see Note 4).

The amortized cost and estimated fair value of available-for-sale investments in debt securities at fiscal 2009 and 2008 year-ends, classified as short-term investments on our consolidated balance sheet, were as follows (in thousands):

	Fiscal Year-end				
		2009	2008		
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value	
Due in less than 1 year	\$41,151	\$41,170	\$2,926	\$2,935	
Due in 1 to 5 years	_	_	275	277	
Due in 5 to 10 years		_			
Due beyond 10 years	54	52	156	151	
Total investments in available-for-sale debt securities	\$41,205	\$41,222	\$3,357	\$3,363	

During fiscal 2009, we received proceeds totaling \$45.7 million from the sale of available-for-sale securities and realized gross losses of less than \$0.1 million. During fiscal 2008, we received proceeds totaling \$70.1 million from the sale of available-for-sale securities and realized gross losses of less than \$0.1 million.

The following table shows the gross unrealized losses and fair values of our investments with unrealized losses that are not deemed to be other-than-temporarily impaired, aggregated by the investment category and length of time that the individual securities have been in a continuous unrealized loss position at fiscal 2009 year-end (in thousands):

	Less Than 12 Months		12 Months or Greater		Total	
Description of Securities	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury and agency obligations	\$2,990	\$	\$	\$	\$2,990	\$
Corporate notes and obligations	_	_	52	(2)	52	(2)
Total	\$2,990	\$	\$52	\$(2)	\$3,042	\$(2)

U.S. Treasury and agency obligations: There were no unrealized losses on these investments.

Corporate notes and obligations: The unrealized loss on our investments in corporate notes and obligations relates to a \$0.1 million investment. The credit ratings of the investments in the notes and obligations range from AAA to A (S&P and Moody's) and therefore the decline in the market value is attributable to change in interest rates and not credit quality.

7. DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

All derivatives, whether designated in hedging relationships or not, are recorded on the balance sheet at fair value. We enter into foreign exchange forwards to minimize the risks of foreign currency fluctuation of specific assets and liabilities on the balance sheet; these are not designated as hedging instruments.

We maintain operations in various countries outside of the United States and 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 and the Japanese Yen. As a result, our earnings and cash flows 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. 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.

For derivative instruments that are not designated as hedging instruments, gains and losses are recognized in other income (expense).

The outstanding notional amounts of hedge contracts, with maximum maturity of 1 month, are as follows (in thousands):

	October 3, 2009	September 27, 2008
Other foreign currency hedge contracts		
Purchase	\$23,199	\$22,310
Sell	(7,779)	(8,470)
Net.	\$15,420	\$13,840

The location and fair value amounts of our derivative instruments reported in our Consolidated Balance Sheets as of October 3, 2009 were as follows (in thousands):

	Asset Derivatives October 3, 2009		Liability Derivatives October 3, 2009	
	Balance Sheet Location Fair Valu		Balance Sheet Location	Fair Value
Derivatives not designated as hedging instruments				
Foreign exchange contracts	Prepaid expenses and		Other current	
	other assets	\$217	liabilities	\$221

The location and amount of non-designated derivative instruments' loss in the Consolidated Statements of Operations for the fiscal year ended October 3, 2009 is as follows (in thousands):

	Location of Loss	Amount of Loss Recognized in Income on Derivatives
	Recognized in	Fiscal Year Ended
	Income on Derivatives	October 3, 2009
Derivatives not designated as hedging instruments		
Foreign exchange contracts	Other income (expense)	\$(541)

8. GOODWILL AND INTANGIBLE ASSETS

During the first quarter of fiscal 2009, our stock price declined substantially, which combined with expectations of declines in forecasted operating results due to the slowdown in the global economy, led the Company to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of December 27, 2008, we performed an interim goodwill impairment evaluation. Goodwill is tested for impairment first by comparing each reporting unit's fair value to its respective carrying value. If such comparison indicates a potential impairment, then the impairment is determined as the difference between the recorded value of goodwill and its fair value. The performance of this test is a two-step process.

Step 1 of the impairment test involves comparing the fair values of the applicable reporting units with their aggregate carrying values, including goodwill. If the carrying amount of a reporting unit exceeds the reporting unit's fair value, we perform Step 2 of the goodwill impairment test to determine the amount of impairment loss. Step 2 of the goodwill impairment test involves comparing the fair value of the affected reporting unit's goodwill against the carrying value of that goodwill.

The reporting units we evaluated for goodwill impairment have been determined to be the same as our operating segments in accordance with SFAS No. 142 and include Commercial Lasers and Components ("CLC") and Specialty Lasers and Systems ("SLS"). We determined the fair value of our reporting units for the Step 1 test using a weighting of the Income (discounted cash flow), Market and Transaction approach valuation methodologies. Management completed and reviewed the results of the Step 1 analysis and concluded that a Step 2 analysis was required only for the CLC reporting unit. Our preliminary analysis indicated that the entire balance of the goodwill in the CLC reporting unit at that date was impaired and we recorded a non-cash goodwill impairment charge of \$19.3 million in the first quarter of fiscal 2009. During the second quarter of fiscal 2009, we completed the Step 2 analysis for the CLC reporting unit at December 27, 2008 and determined that the entire balance of goodwill in the CLC reporting unit at that date was impaired. The estimated fair value of our SLS reporting unit exceeded its carrying value so no further impairment analysis was required for this reporting unit.

During the second quarter of fiscal 2009, our expectations of declines in forecasted operating results due to the slowdown in the global economy and the further declines in our stock price led us to conclude that a triggering event for review for potential goodwill impairment had occurred. Accordingly, as of April 4, 2009, we performed an interim goodwill impairment evaluation, as required under ASC 350-10. This interim impairment evaluation utilized the same valuation techniques used in our impairment valuation in the first quarter of fiscal 2009. Based on the results of our Step 1 analysis, we determined that no additional goodwill impairment was indicated. During the third quarter of fiscal 2009, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment.

We performed our annual impairment testing as of the beginning of the fourth quarter using the opening balance sheet as of the first day of the fourth quarter of fiscal 2009 and noted no impairment. During the fourth quarter of fiscal 2009, we noted no indications of impairment or triggering events to cause us to review goodwill for potential impairment.

The changes in the carrying amount of goodwill by segment for fiscal 2009 and 2008 are as follows (in thousands):

	Commercial Lasers and	Specialty Laser	
	Components	Systems	Total
Balance as of September 29, 2007	\$24,091	\$59,285	\$83,376
Translation adjustments and other	(305)	3,747	3,442
Balance as of September 27, 2008	23,786	63,032	86,818
Reclassification (see Note 18).	(4,500)	4,500	
Impairment loss	(19,286)		(19,286)
Translation adjustments and other		(565)	(565)
Balance as of October 3, 2009	<u> </u>	\$66,967	\$66,967

The components of our amortizable intangible assets are as follows (in thousands):

	Fiscal 2009 Year-end		Fiscal 2008 Year-end		ıd	
	Gross Carrying Amount	Accumulated Amortization	Net	Gross Carrying Amount	Accumulated Amortization	Net
Existing technology	\$54,477	\$(39,220)	\$15,257	\$54,615	\$(33,370)	\$21,245
Patents	10,440	(8,975)	1,465	10,496	(8,090)	2,406
Order backlog	5,015	(5,002)	13	5,052	(5,034)	18
Customer lists	5,421	(3,763)	1,658	5,440	(3,253)	2,187
Trade name	3,833	(2,488)	1,345	3,861	(2,236)	1,625
Non-compete agreement	1,590	(1,590)	_	2,454	(2,379)	75
Total	\$80,776	\$(61,038)	\$19,738	\$81,918	\$(54,362)	\$27,556

The weighted average remaining amortization period for existing technology, patents, trade name, customer lists and non-compete agreements are approximately 4 years, 2 years, 4 years, 3 years and 1 year, respectively. Amortization expense for intangible assets during fiscal years 2009, 2008 and 2007 was \$7.5 million, \$8.7 million and \$8.2 million, respectively. Estimated amortization expense for the next five fiscal years and all years thereafter are as follows (in thousands):

	Estimated Amortization Expense
2010	\$6,905
2011	5,121
2012	3,360
2013	1,945
2014	1,108
Thereafter	1,299
Total	\$19,738

9. BALANCE SHEET DETAILS

Prepaid expenses and other assets consist of the following (in thousands):

	Fiscal Year-end	
	2009	2008
Prepaid and refundable income taxes.	\$22,041	\$23,277
Prepaid expenses and other	16,928	18,516
Total prepaid expenses and other assets	\$38,969	\$41,793

Other assets consist of the following (in thousands):

	Fiscal Year-end	
	2009	2008
Assets related to deferred compensation arrangements (see Note 14)	\$21,629	\$28,122
Deferred tax assets	60,819	50,208
Other assets	2,889	2,900
Total other assets	\$85,337	\$81,230

Other current liabilities consist of the following (in thousands):

	Fiscal Year-end	
	2009	2008
Accrued payroll and benefits	\$19,967	\$30,807
Accrued expenses and other	9,918	12,252
Reserve for warranty	10,211	13,214
Other taxes payable	4,361	4,858
Customer deposits.	2,208	2,324
Accrued restructuring charges (Note 3)	1,652	3,587
Deferred income	14,424	12,096
Total other current liabilities	\$62,741	\$79,138

Other long-term liabilities consist of the following (in thousands):

	Fiscal Year-end	
	2009	2008
Long-term taxes payable	\$51,483	\$45,343
Deferred compensation (see Note 14)	22,723	28,459
Deferred tax liabilities	9,651	13,738
Deferred income	2,109	1,800
Asset retirement liability (see Note 2)	1,342	1,464
Other long-term liabilities	4,377	3,802
Total other long-term liabilities	\$91,685	\$94,606

10. SHORT-TERM BORROWINGS

We have several lines of credit which allow us to borrow in the applicable local currency. At October 3, 2009, we had used \$1.3 million of our available foreign lines of credit, which total \$17.3 million. These credit facilities were used as guarantees in Europe during fiscal 2009. In addition, our domestic line of credit, which was opened on March 31, 2008, includes a \$40 million unsecured revolving credit account with Union Bank of California, which expires on March 31, 2010 and is subject to covenants related to financial ratios and tangible net worth with which we are currently in compliance. No amounts have been drawn on our domestic line of credit as of October 3, 2009

11. LONG-TERM OBLIGATIONS

The components of long-term obligations are as follows (in thousands):

	Fiscal Year-end	
	2009	2008
Capital leases	\$15	\$24
Current portion	(9)	(9)
Long-term obligations	\$6	\$15

12. COMMITMENTS AND CONTINGENCIES

Commitments

We lease several of our facilities under operating leases.

Future minimum payments under our non-cancelable operating leases at October 3, 2009 are as follows (in thousands):

Fiscal	
2010.	\$7,669
2011	
2012	4,494
2013	3,692
2014	3,371
Thereafter	6,151
Total	\$31,715

Rent expense, exclusive of sublease income, was \$11.8 million, \$10.5 million and \$9.5 million in fiscal 2009, 2008 and 2007, respectively. Sublease income was \$0.1 million, \$0.1 million and \$0.8 million for fiscal years 2009, 2008 and 2007, respectively.

As of October 3, 2009, we had total purchase commitments for inventory of approximately \$9.9 million and purchase obligations for fixed assets and services of \$5.2 million compared to \$15.5 million of purchase commitments for inventory and \$8.2 million of purchase obligations for fixed assets and services at September 27, 2008.

Contingencies

We are subject to legal claims and litigation arising in the ordinary course of business, such as employment or intellectual property claims, including, but not limited to, the matters described below. The outcome of any such matters is currently not determinable. Although we do not expect that such legal claims and litigation will ultimately have a material adverse effect on our consolidated financial position or results of operations, an adverse result in one or more matters could negatively affect our results in the period in which they occur.

Between February 15, 2007 and March 2, 2007, three purported shareholder derivative lawsuits were filed in the United States District Court for the Northern District of California against certain of the Company's current and former officers and directors. The Company is named as a nominal defendant. The complaints generally allege that the defendants breached their fiduciary duties and violated the securities laws in connection with the granting of stock options, the accounting treatment for such grants, the issuance of allegedly misleading public statements and stock sales by certain of the individual defendants. On May 30, 2007, these lawsuits were consolidated under the caption In re Coherent, Inc. Shareholder Derivative Litigation, Lead Case No. C-07-0955-JF (N.D. Cal.). On June 25, 2007, plaintiffs filed an amended consolidated complaint. The consolidated complaint asserts causes of action for alleged violations of federal securities laws, violations of California securities laws, breaches of fiduciary duty and/or aiding and abetting breaches of fiduciary duty, abuse of control, gross mismanagement, constructive fraud, corporate waste, unjust enrichment, insider selling and misappropriation of information. The consolidated complaint seeks, among other relief, disgorgement and damages in an unspecified amount, an accounting, rescission of allegedly improper stock option grants, punitive damages and attorneys' fees and costs.

The Company's Board of Directors appointed a Special Litigation Committee ("SLC") comprised of independent director Sandeep Vij to investigate and evaluate the claims asserted in the derivative litigation and to determine what action(s) should be taken with respect to the derivative litigation. On September 8, 2009, Coherent, Inc., by and through the SLC, plaintiffs, and certain of Coherent's former and current officers and directors filed with the court a Stipulation of Settlement reflecting the terms of a settlement that would resolve all claims alleged in the consolidated complaint.

On September 14, 2009, the United States District Court for the Northern District of California issued an order granting preliminary approval of the settlement of the three purported shareholder derivative lawsuits. On November 20, 2009, the court held a hearing for final approval of the settlement, and on November 24, 2009, the court entered an Order and Final Judgment, which approved the settlement and dismissed the action with prejudice. Following the payment of the attorneys' fees and expenses, we received a net cash benefit of \$2.25 million from the settlement on December 11, 2009.

13. STOCKHOLDERS' EQUITY

Each outstanding share of our common stock carried a stock purchase right ("right") issued pursuant to a dividend distribution declared by our Board of Directors and distributed to stockholders of record on November 17, 1989. When exercisable, each right entitled the stockholder to buy one share of our common stock at an exercise price of \$80. The rights would become exercisable following the tenth day after a person or group announces an acquisition of 20% or more of our common stock or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20% or more of the common stock. The rights would be redeemed at \$.01 per right at any time on or before the 10th day following the acquisition by a person or group of 20% or more of our common stock.

If, prior to redemption of the rights, we were acquired in a merger or other business combination in which we were the surviving corporation, or a person or group acquires 20% or more of our common stock, each right owned by a holder of less than 20% of the common stock would entitle its owner to purchase, at the right's then current exercise price, a number of shares of common stock of Coherent having a fair market value equal to twice the right's exercise price. If we sold more than 50% of our assets or earning power or were acquired in a merger or other business combination in which we were not the surviving corporation, the acquiring person was required to assume the obligations under the rights and the rights would become exercisable to acquire common stock of the acquiring person at the discounted price. These rights expired on December 16, 2008.

On February 12, 2008, the Company announced that the Board of Directors had authorized the Company to repurchase up to \$225 million of its common stock through a modified "Dutch Auction" tender offer and an additional \$25 million of its common stock, following the completion or termination of the tender offer, under its stock repurchase program, terminating no later than February 11, 2009. On March 17, 2008, we completed our tender offer, repurchased and retired 7,972,313 shares of outstanding common stock at a price of \$28.50 per share for a total of \$228.2 million, including expenses. Such repurchases were accounted for as a reduction in additional paid in capital. There were no other repurchases during fiscal 2009 or fiscal 2008 and the program has expired.

14. EMPLOYEE STOCK OPTION 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. Asset investments in Company-owned life insurance contracts held under the plans are recorded at the cash surrender value of the insurance contracts. Asset investments in mutual funds and cash are recorded at their respective fair values. 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. Increases in the obligation to plan participants are recorded as operating expenses. At fiscal 2009 year-end, the cash surrender value of Company-owned life insurance contracts was \$16.7 million and the fair value of mutual funds was \$7.1 million. At fiscal 2009 year-end, \$21.6 million was recorded as non-current other assets (see Note 9) and \$2.2 million was recorded as current assets. At fiscal 2008 year-end, the cash surrender value of Company-owned life insurance contracts was \$19.4 million and the fair value of mutual funds was \$10.7 million. At fiscal 2008 year-end, \$28.1 million was recorded as non-current other assets (see Note 9) and \$2.0 million was recorded as current assets. 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. See Note 9 "Balance Sheet Details" for more information regarding the liability balances at fiscal 2009 and 2008 year ends.

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. Employees become eligible for participation on their first day of employment and for Company matching contributions after completing one year of service. The Company matching contribution percentage was decreased from 6% to 4% during fiscal 2009. Our contributions (net of forfeitures) during fiscal 2009, 2008, and 2007 were \$3.4 million, \$4.8 million and \$4.1 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 2009, 2008 and 2007, a total of

224,226, none and 87,191 shares, respectively, were purchased by and distributed to employees at an average price of \$19.83, none and \$28.93 per share, respectively. At fiscal 2009 year-end, we had 600,310 shares of our common stock reserved for future issuance under the plan.

In the second quarter of fiscal 2007, the ESPP was suspended and employee contributions made to the ESPP were returned while a voluntary review of our historical stock option practices was conducted. The ESPP was reopened on March 2, 2008 with an 8 month offering period ending October 31, 2008 and employees began making contributions during the second quarter of fiscal 2008.

Stock Option Plans

We have two Stock Option Plans for which all service providers are eligible participants and a non-employee Directors' Stock Option Plan for which only non-employee directors are eligible participants. The Directors' Stock Option Plan is designed to work automatically without administration, however to the extent administration is necessary, it will be performed by the Board of Directors (or an independent committee thereof). Under these three plans, Coherent may grant options to purchase up to an aggregate of 5,500,000, 6,300,000 and 689,000 shares of common stock, respectively, of which zero, 3,030,282 and 124,000, respectively, remain available for grant at fiscal 2009 year-end. Employee options are generally exercisable between two and four years from the grant date at a price equal to the fair market value of the common stock on the date of the grant and generally vest 25% to 50% annually. The Company settles stock option exercises with newly issued shares of common stock. Grants under employee plans generally expire six years from the original grant date. Director options are automatically granted to our non-employee directors. Such directors initially receive a stock option for 24,000 shares exercisable over a three-year period and an award of restricted stock units of 2,000 shares. Additionally, the non-employee directors receive an annual stock option grant of 6,000 shares exercisable as to 50% of the shares on the day prior to each of the next two annual stockholder meetings. Grants under director plans expire ten years from the original grant date. In addition, each non-employee director receives an annual grant of 2,000 shares of restricted stock units that vest on the day prior to the annual stockholder meeting held in the third calendar year following the date of grant.

In the second quarter of fiscal 2007, the Company stopped granting stock options while a voluntary review of our historical stock option practices was conducted. The Company resumed granting stock options in the first quarter of fiscal 2008.

In April 2008, we initiated a tender offer for non-executive officer employees related to certain discount options discovered during our voluntary review of our historical stock option practices. Discount options are options with an exercise price that is less than the fair market value of the shares underlying the option at the time of grant. The discounted options included in this offer were certain options which vested after December 31, 2004. During the tender offer period, employees had the ability to amend the exercise price per share for eligible options to the fair market value of the underlying option as of the measurement date of that option, and receive a cash payment for the difference between the discounted share price and the amended share price. This amendment was designed to allow holders of discount options to avoid certain adverse tax consequences associated with discount options. The offer expired on May 9, 2008. The incremental stock compensation expense resulting from the offer was \$0.4 million which was recognized immediately as all eligible options were fully vested. During fiscal 2009 and 2008, we also recorded expense of \$0.5 million and \$2.5 million, respectively, for tax payments to be made to United States and United Kingdom tax authorities on behalf of employees in connection with these amended shares.

Fair Value of Stock Compensation

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 over the respective requisite service period of the awards.

Determining Fair Value

Valuation and amortization method—We estimate the fair value of stock options granted using the Black-Scholes-Merton option-pricing formula and a single option award approach. This fair value is then amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period.

Expected Term—The expected term represents the period that our stock-based awards are expected to be outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of its stock-based awards.

Expected Volatility—Our computation of expected volatility is based on a combination of historical volatility and market-based implied volatility.

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.

Expected Dividend—The expected dividend assumption is based on our current expectations about our anticipated dividend policy.

The fair values of the Company's stock options granted to employees and shares purchased under the stock purchase plan for fiscal 2009, 2008 and 2007 were estimated using the following weighted-average assumptions:

	Employee Stock Option Plans		Employee Stock Purchase Plans			
	Fiscal			Fiscal		
	2009	2008	2007	2009	2008	2007
Expected life in years	4.2	3.5	4.4	0.5	0.7	0.5
Expected volatility	48.0%	29.5%	34.2%	50.7%	31.9%	29.0%
Risk-free interest rate	2.0%	3.9%	4.7%	0.8%	1.8%	5.1%
Expected dividends	none	none	none	none	none	none
Weighted average fair value per share	\$8.95	\$8.78	\$12.04	\$6.50	\$7.31	\$8.43

Stock Compensation Expense

The following table shows total stock-based compensation expense included in the Consolidated Statements of Operations for fiscal 2009, 2008 and 2007 (in thousands):

	Fiscal 2009	Fiscal 2008	Fiscal 2007
Cost of sales	\$753	\$1,893	\$1,809
Research and development	933	1,970	1,899
Selling, general and administrative	5,199	9,062	6,666
Income tax benefit	(1,084)	(3,919)	(3,204)
	\$5,801	\$9,006	\$7,170

Total stock-based compensation cost capitalized as part of inventory during fiscal 2009 was \$0.8 million. \$0.9 million was amortized into income during fiscal 2009, which includes amounts capitalized in fiscal 2009 and amounts carried over from fiscal 2008. Total stock-based compensation cost capitalized as part of inventory during fiscal 2008 was \$1.3 million. \$1.1 million was amortized into income during fiscal 2008, which includes amounts capitalized in fiscal 2008 and amounts carried over from fiscal 2007. Management has made an estimate of expected forfeitures and is recognizing compensation costs only for those equity awards expected to vest.

At fiscal 2009 year-end, the total compensation cost related to unvested stock-based awards granted to employees under the Company's stock option and award plans but not yet recognized was approximately \$7.3 million, net of estimated forfeitures of \$1.4 million. This cost will be amortized on a straight-line basis over a weighted-average period of approximately 1.5 years and will be adjusted for subsequent changes in estimated forfeitures.

At fiscal 2009 year-end, the total compensation cost related to options to purchase common shares under the ESPP but not yet recognized was approximately \$0.1 million. This cost will be amortized on a straight-line basis over a weighted-average period of approximately one month.

The stock option exercise cash flows reclass from operations to financing, results from the excess tax benefits (i.e., windfalls only for tax deductions in excess of the stock-based compensation cost recognized) determined on a grant-by-grant basis. During fiscal 2009 and fiscal 2008, we recorded approximately \$0.0 million and \$0.7 million, respectively, of excess tax benefits as cash flows from financing activities.

During fiscal 2008, our Board of Directors approved an extension of the exercise period to August 25, 2009 for 397,500 fully vested stock options previously granted by the Company to employees. As a result, we recorded approximately \$0.5 million in compensation expense related to the stock option modification during fiscal 2008. During fiscal 2007, our Board of Directors

approved an extension of the exercise period to December 31, 2007 for 210,088 fully vested stock options previously granted by the Company to employees. As a result, we recorded approximately \$0.5 million in compensation expense related to the stock option modification during fiscal 2007. There were no extensions granted during fiscal 2009.

During fiscal 2008, we recorded cash-based compensation expense of \$0.6 million for cash payments to employees for options that were not able to be exercised due to the internal stock option investigation. In addition, we recorded compensation expense of \$0.5 million and \$1.6 million, respectively, in fiscal 2009 and fiscal 2008 for tax payments to be made to United States and United Kingdom tax authorities on behalf of employees in connection with discounted options previously exercised, for the adverse tax consequences associated with these discount options. We also recorded \$0.4 million in fiscal 2008 for tax payments to be made to United States tax authorities on behalf of employees in connection with shares amended to allow the holders of unexercised discount options to avoid certain adverse tax consequences associated with those discount options.

Stock Options & Awards Activity

The following is a summary of option activity for our Stock Option Plans for the year ended October 3, 2009 (in thousands, except per share amounts and remaining contractual term in years):

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value
Outstanding at September 28, 2008	2,880	\$30.31		
Granted	499	22.30		
Exercised	(9)	25.37		
Forfeitures	(26)	25.94		
Expirations	(850)	28.34		
Outstanding at October 3, 2009	2,494	\$29.44	3.4	\$562
Vested and expected to vest at October 3, 2009	2,458	\$29.54	3.4	\$547
Exercisable at October 3, 2009.	1,968	\$31.23	2.7	\$147

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying options and the quoted price of our common stock for in-the-money options. During fiscal 2009, 2008 and 2007, the aggregate intrinsic value of options exercised under the Company's stock option plans were \$0.1 million, \$6.0 million and \$0.5 million, respectively, determined as of the date of option exercise.

Under our 2001 Stock Plans, employees and non-employee directors are eligible for grants of restricted stock awards and/or restricted stock units. Restricted stock awards and restricted stock units are independent of option grants and are typically subject to vesting restrictions—either time-based or performance-based conditions for vesting. All of the shares of restricted stock outstanding as of fiscal 2009 year-end were subject to forfeiture if employment terminates prior to the release of restrictions. Until such restricted stock vests, ownership of the shares (including those issuable upon vesting of the applicable restricted stock unit) cannot be transferred.

- The service based restricted stock awards generally vest 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.
- The performance based restricted stock grants were subject to annual vesting over three years depending upon the achievement of performance measurements ("Performance Restricted Stock").
- The performance-based 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 ("Performance RSUs").

The performance measurements for the Performance Restricted Stock were tied to the Company's internal metrics for revenue growth and EBITDA percentage and are variable, so that the number of shares earned ranged from 0% to 200% of the grant target for fiscal 2007 and fiscal 2008. For fiscal 2008 and 2007, the Company determined that the metrics have not been met, and that no shares would be earned. These grants expired during fiscal 2009.

The Performance RSUs were granted during the second quarter of fiscal 2008 and have a single vesting measurement date of November 14, 2010, which vest as to anywhere between 0% and 300% of the targeted amount based upon achievement by the Company of (a) an annual revenue threshold amount and (b) adjusted EBITDA percentage targets. For the purposes of calculating potentially dilutive shares, performance RSU's are included at 100% of target.

Restricted stock (not including performance based restricted stock and units) has the same cash dividend and voting rights as other common stock and is considered to be currently issued and outstanding. The cost of the awards and units, determined to be the fair market value of the shares at the date of grant, is expensed ratably over the period the restrictions lapse. We had 356,528 shares and units of restricted stock outstanding at fiscal 2009 year-end and 341,015 shares and units of restricted stock outstanding at fiscal 2008 year-end.

The following table summarizes our restricted stock award and restricted stock unit activity for fiscal 2009, 2008 and 2007 (in thousands, except per share amounts):

	Number of Shares(3)	Weighted Average Grant Date Fair Value
Nonvested stock at September 30, 2006	299	\$33.06
Granted	8	32.23
Vested(1)	(19)	33.20
Forfeited	(27)	33.23
Nonvested stock at September 29, 2007	261	\$33.02
Granted	262	28.72
Vested(2)	(79)	33.35
Forfeited	(103)	32.80
Nonvested stock at September 27, 2008	341	\$29.70
Granted	178	22.38
Vested(2)	(112)	30.72
Forfeited	(50)	30.22
Nonvested stock at October 3, 2009.	357	\$25.66

⁽¹⁾ Performance-based restricted shares earned based on achievement of goals for fiscal 2006.

Option activity for all plans for fiscal 2008 and 2007 is summarized as follows (in thousands, except per share amounts):

	Outstanding Options		
	Number of Shares	Weighted Average Exercise Price Per Share	
Outstanding, September 30, 2006	3,823	\$29.15	
Options granted	25	33.87	
Options exercised	(53)	24.13	
Options forfeited	(99)	31.26	
Options expired	(500)	33.37	
Outstanding, September 29, 2007	3,196	\$29.00	
Options granted	851	32.50	
Options exercised	(643)	25.67	
Options forfeited	(75)	32.99	
Options expired	(449)	31.36	
Outstanding, September 27, 2008	2,880	\$30.31	

⁽²⁾ Service-based restricted stock vested during fiscal 2008 and 2009.

⁽³⁾ Performance-based awards and units included at 100% of target goal.

At fiscal 2009 year-end, 3,154,282 options were available for future grant under all plans. At fiscal 2009 year-end, all outstanding stock options have been issued under plans approved by our shareholders.

The following table summarizes information about stock options outstanding at fiscal 2009 year-end:

	O _I	Options Outstanding			ercisable
Range of Exercise Prices	Number of Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Life (Years)	Number of Shares	Weighted Average Exercise Price per Share
\$15.21 - \$22.97	113,350	\$18.01	6.39	37,500	\$19.06
\$22.97 - \$23.16	406,300	23.16	5.10	1,850	23.00
\$24.19 - \$26.12	44,419	25.74	1.20	44,419	25.74
\$26.41 - \$26.41	291,000	26.41	0.80	291,000	26.41
\$26.90 - \$28.40	253,046	27.50	3.76	209,046	27.41
\$28.72 - \$32.23	185,350	31.74	2.60	182,850	31.78
\$32.95 - \$32.95	680,250	32.95	4.00	680,250	32.95
\$33.18 - \$35.01	402,965	34.18	2.61	402,965	34.18
\$35.03 - \$35.27	114,640	35.04	1.65	114,640	35.04
\$37.91 - \$37.91	3,000	37.91	2.59	3,000	37.91
\$15.21 - \$37.91	2,494,320	\$29.44	3.40	1,967,520	\$31.23

There were 2,442,162 and 2,865,401 options exercisable as of fiscal 2008 and 2007 year-ends with weighted average exercise prices of \$29.99 per share and \$27.99 per share, respectively.

15. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Activity in accumulated other comprehensive income (loss) related to derivatives, net of tax, held by us is as follows (in thousands):

Balance, September 29, 2007	\$(98)
Changes in fair value of derivatives	
Net losses reclassified from OCI	5
Balance, September 27, 2008	(93)
Changes in fair value of derivatives	
Net losses reclassified from OCI	8
Balance, October 3, 2009	\$(85)

Accumulated other comprehensive income (net of tax) at fiscal 2009 year-end is comprised of accumulated translation adjustments of \$80.3 million and net loss on derivative instruments of \$0.1 million. Accumulated other comprehensive income (net of tax) at fiscal 2008 year-end is comprised of accumulated translation adjustments of \$79.2 million and net loss on derivative instruments of \$0.1 million.

16. OTHER INCOME (EXPENSE), NET

Other income (expense) includes other-net which is comprised of the following (in thousands):

	Fiscal			
	2009	2008	2007	
Foreign exchange gain (loss)	\$(1,101)	\$1,965	\$1,259	
Sublease income, net of expenses			810	
Net gain on sale of assets			974	
Japan consumption tax benefit(1)	2,497	3,330	_	
Gain (loss) on investments, net	(4,305)	(99)	2,880	
Other—net	(46)	(1,225)	(408)	
Other income (expense), net	\$(2,955)	\$3,971	\$5,515	

⁽¹⁾ The Japanese consumption tax (JCT) benefit is due to a two-year exemption from the JCT registration and filing requirements.

17. INCOME TAXES

The provision for (benefit from) income taxes on income (loss) before income taxes consists of the following (in thousands):

	Fiscal		
	2009	2008	2007
Currently payable:			
Federal	\$735	\$5,956	\$3,434
State	103	316	542
Foreign	10,154	10,959	8,045
	10,992	17,231	12,021
Deferred:			
Federal	(10,126)	(7,069)	(3,586)
State	(537)	1,195	(3,033)
Foreign	(865)	2,527	7,570
	(11,528)	(3,347)	951
Provision for (benefit from) income taxes	\$(536)	\$13,884	\$12,972

The components of income (loss) before income taxes consist of (in thousands):

	Fiscal		
	2009	2008	2007
United States	\$(56,043)	\$(6,222)	\$(11,376)
Foreign	20,188	43,509	40,299
Income (loss) before income taxes	\$(35,855)	\$37,287	\$28,923

The reconciliation of the income tax expense (benefit) at the U.S. Federal statutory rate (35% in fiscal years 2009, 2008 and 2007) to actual income tax expense (benefit) is as follows (in thousands):

	Fiscal		
	2009	2008	2007
Federal statutory tax expense (benefit)	\$(12,549)	\$13,051	\$10,123
Valuation allowance	6,756	218	3,679
Foreign taxes at rates in excess of (less than) U.S. rates, net	(403)	(186)	3,436
Stock-based compensation	1,875	1,264	782
State income taxes, net of federal income tax benefit	(1,376)	471	(333)
Research and development credit	(2,525)	(1,153)	(5,701)
In-process research and development.	_	_	770
Impairment of goodwill	6,750		_
Deferred compensation	944	187	(550)
Other	(8)	32	766
Provision for (benefit from) income taxes	\$(536)	\$13,884	\$12,972
Effective tax rate.	1.5%	37.2%	44.9%

The significant components of deferred tax assets and liabilities were (in thousands):

	Fiscal year-end	
	2009	2008
Deferred tax assets:		
Reserves and accruals not currently deductible	\$23,954	\$24,914
Operating loss carryforwards and tax credits.	61,691	49,588
Capital loss carryforwards	54	1,672
Asset impairment	_	706
Other prepaids	6,336	5,753
Deferred service revenue	2,233	1,912
Depreciation and amortization	2,600	43
Inventory capitalization.	4,870	1,460
Stock-based compensation	9,124	9,037
Competent authority offset to transfer pricing tax reserves	19,762	18,949
Other	61	_
	130,685	114,034
Valuation allowance	(6,807)	(1,672)
	123,878	112,362
Deferred tax liabilities:		
Gain on issuance of stock by subsidiary	22,660	22,660
Depreciation and amortization	7,842	8,580
Accumulated translation adjustment.	5,308	7,306
Other	9,960	9,055
	45,770	47,601
Total deferred tax assets and liabilities	\$78,108	\$64,761

In determining our fiscal 2009, 2008 and 2007 tax provisions under ASC Subtopic 740, "Income Taxes", we calculated the deferred tax assets and liabilities for each separate tax entity. We then considered a number of factors including the positive 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 R&D tax credits, foreign net operating losses and capital loss carryforwards at fiscal 2009, 2008 and 2007 year ends.

For U.S. tax purposes, we increased our valuation allowance on deferred tax assets to \$6.8 million for fiscal 2009 primarily for California R&D tax credits as a result of new California legislation and the ability to utilize foreign net operating losses.

The net deferred tax asset is classified on the consolidated balance sheets as follows (in thousands):

	Fiscal year-end	
	2009	2008
Current deferred income tax assets	\$28,164	\$30,121
Current deferred income tax liabilities	(1,224)	(1,830)
Non-current deferred income tax assets.	60,819	50,208
Non-current deferred income tax liabilities	(9,651)	(13,738)
Net deferred tax assets	\$78,108	\$64,761

We have various tax attribute carryforwards which include the following:

- Federal net operating loss carryforwards of \$12.2 million which will expire in fiscal years 2024 to 2029. Foreign net operating loss carryforwards are \$11.2 million, of which \$7.5 million have no expiration date and of which \$3.7 million will expire in fiscal years 2017 to 2019.
- Federal capital loss carryforwards of \$0.1 million which will expire in fiscal year 2011. State capital loss carryforwards of \$0.1 million which will expire in fiscal 2011.
- Federal R&D credit carryforwards of \$11.0 million which will expire in fiscal years 2022 to 2029. California R&D credit carryforwards of \$14.7 million that have no expiration date.
- Federal foreign tax credit carryforwards of \$18.5 million which will expire in fiscal years 2015 to 2019.

Included in the net deferred tax asset balance is \$5.3 million of deferred tax liabilities related to the accumulated translation adjustment. The associated tax expenses were appropriately recorded as a part of other comprehensive income.

The IRS is conducting an audit of our 2003 and 2004 tax returns. The IRS has issued a number of Notices of Proposed Adjustments ("NOPAs") to these returns. Among other items, the IRS has challenged our research and development credits and our extraterritorial income ("ETI") exclusion. We have agreed to the various adjustments proposed by the IRS and we believe that we have adequately provided for these exposures and any other items identified by the IRS as a result of the audit of these tax years. As part of its audit of our 2003 and 2004 years, the IRS has requested information related to our stock option investigation and we complied with this request and we will address any other issues that are raised in a timely manner. The IRS has also indicated that it may consider an audit of our 2005 and 2006 tax returns.

The IRS is also auditing the research and development credits generated in the years 1999 through 2001 and carried forward to future tax years. We received a NOPA from the IRS in October 2008 to decrease the amount of research and development credits generated in years 2000 and 2001. We have responded to this NOPA and we are disputing the adjustment with the IRS through the appeals process available to us. While we believe we have adequately provided for any adjustments related to these credits that may be determined under the IRS appeals process, there exists the possibility of a material adverse impact on our results of operations in the event that this issue is resolved unfavorably to us.

The German tax authorities are conducting an audit of our subsidiary in Göttingen and its affiliates for the tax years 1999 through 2005. We believe that we have adequately provided for any adjustments that may be proposed by the German tax authorities.

Effective September 30, 2007, we adopted the provisions of ASC Subtopic 740, "Income Taxes" (formerly FASB Financial Interpretation ("FIN") No. 48, "Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109" and FASB Staff Position FIN 48-1 "Definition of Settlement in FASB Interpretation No. 48"). Upon adoption, we recorded a cumulative effect of a change in accounting principle that resulted in a decrease to retained earnings of \$1.4 million in accordance with the transition rules. We had historically classified interest and penalties and unrecognized tax benefits as current liabilities. With this adoption, we classify gross interest and penalties and unrecognized tax benefits that are not expected to result in payment within one year as non-current liabilities in the consolidated balance sheets. The total amount of gross unrecognized tax benefits as of the date of adoption was \$51.7 million, of which \$27.6 million, if recognized, would affect our effective tax rate. As of October 3, 2009, the total amount of gross unrecognized tax benefits was \$58.1 million, of which \$32.5 million, if recognized, would affect our effective tax rate. Our total gross unrecognized tax benefit was classified as non-current liabilities in the consolidated balance sheets. Our policy to include interest and penalties related to unrecognized tax benefits within the provision for income taxes did not change as a result of adopting this guidance. As of October 3, 2009, the total amount of gross interest and penalties accrued was \$7.7 million, which is classified as non-current liabilities in the consolidated balance sheets. As of September 27, 2008, we had accrued \$6.5 million for the gross interest and penalties relating to the gross unrecognized tax benefits.

Management believes that it has adequately provided for any adjustments that may result from tax examinations. However, the outcome of tax audits cannot be predicted with certainty. Should any issues addressed in our tax audits be resolved in a manner not consistent with management's expectations, we could be required to adjust our provision for income tax in the period such resolution occurs. Although timing of the resolution and/or closure of audits is highly uncertain, we do not believe it is reasonably possible that our unrecognized tax benefits would materially change in the next twelve months. We expect to settle the German tax audit previously mentioned within the next twelve months, however, we do not expect this to materially impact our unrecognized tax benefits.

A reconciliation of the change in gross unrecognized tax benefits, excluding interest and penalties, is as follows (in thousands):

	Fiscal year-end	
	2009	2008
Balance as of the beginning of the year	\$45,211	\$40,116
Tax positions related to current year:		
Additions	1,610	1,349
Reductions	_	
Tax positions related to prior year:		
Additions	3,549	4,214
Reductions	_	(468)
Settlements	_	_
Lapses in statutes of limitations	_	
Reductions	_	
Balance as of end of year	\$50,370	\$45,211

A summary of the fiscal tax years that remain subject to examination, as of October 3, 2009, for our major tax jurisdictions is:

United States—Federal.	1999—forward
United States—Various States	2001—forward
Netherlands	2005—forward
Germany	1999—forward
Japan	2004—forward
United Kingdom	2002—forward

The "Emergency Economic Stabilization Act of 2008," which contains the "Tax Extenders and Alternative Minimum Tax Relief Act of 2008", was enacted on October 3, 2008. Under the Act, the federal R&D credit was retroactively extended for amounts paid or incurred after December 31, 2007 and before January 1, 2010. The effects of the change in the tax law were recognized in our first quarter of fiscal 2009, which is the quarter in which the law was enacted. In addition to the federal legislation, California Assembly Bill 1452 was enacted on September 30, 2008. This legislation limits the California R&D credit to 50% of the California tax liability for tax years beginning on or after January 1, 2008 and before January 1, 2010. New California budget legislation was also signed on February 20, 2009 that allows taxpayers to make an annual election of a single sales factor apportionment formula for tax years beginning on or after January 1, 2011. We recognized the effects of these changes in the California legislation in our second quarter of fiscal 2009.

Subsequent to fiscal 2009, the "Worker, Homeownership and Business Assistance Act of 2009" was enacted on November 6, 2009. Under the Act, businesses with net operating losses for 2008 and 2009 may carry back those losses for up to five years. The Company is in the process of analyzing the impact of this new law.

18. SEGMENT AND GEOGRAPHIC INFORMATION

We are organized into two reportable operating segments: Commercial Lasers and Components ("CLC") and Specialty Lasers and Systems ("SLS"). This segmentation reflects the go-to-market strategies for various products and markets. While both segments work to deliver cost-effective solutions, CLC focuses on higher volume products that are offered in set configurations. The product architectures are designed for easy exchange at the point of use such that product service and repairs are based upon advanced replacement and depot (i.e., factory) repair. CLC's primary markets include OEM components and instrumentation

and materials processing. SLS develops and manufacturers configurable, advanced-performance products largely serving the microelectronics and scientific research markets. The size and complexity of many of our SLS products require service to be performed at the customer site by factory-trained field service engineers.

Effective as of the beginning of the first quarter of fiscal 2009, in order to align all of our diode-pumped solid state ("DPSS") technology into the same reportable operating segment, management moved the DPSS Germany and Crystal product families from the CLC segment into the SLS segment. This allows for leverage and efficiencies in many parts of the business. Crystal is primarily an internal supplier that supports the DPSS product family. This concentrates all DPSS product families in the SLS segment effective as of the first quarter of fiscal 2009. All of reporting has been aligned to reflect the revised reportable operating segments (CLC and SLS) and prior periods have been restated.

We have identified CLC and SLS as operating segments for which discrete financial information was available. Both units have engineering, marketing, product business management and product line management. 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 chief operating decision maker (CODM) as he assesses the performance of the segments and decides how to allocate resources to the segments. Income (loss) from operations is the measure of profit and loss that our CODM uses to assess performance and make decisions. Assets are not a measure used to assess the performance of the company by the CODM; therefore we do not report assets by segment internally or in our disclosures. Income (loss) from 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 to our operating segments certain operating expenses, which we manage separately at the corporate level. These unallocated costs include stock-based compensation, 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 sales and income (loss) from operations for our operating segments (in thousands):

	Fiscal		
	2009 2008		2007
Net sales:			
Commercial Lasers and Components	\$125,619	\$198,748	\$208,868
Specialty Laser Systems.	310,163	400,414	390,616
Corporate and other	100	100	1,669
Total net sales.	\$435,882	\$599,262	\$601,153
Income (loss) from operations:			
Commercial Lasers and Components	\$(45,240)	\$6,620	\$3,365
Specialty Laser Systems.	31,751	58,948	53,129
Corporate and other	(21,668)	(42,976)	(45,373)
Total income (loss) from operations	\$(35,157)	\$22,592	\$11,121

The following table provides a reconciliation of our total income (loss) from operations to net income (loss) (in thousands):

	Fiscal		
Reconciliation of Income (Loss) From Operations to Net Income (Loss)	2009	2008	2007
Total income (loss) from operations	\$(35,157)	\$22,592	\$11,121
Total other income (expense), net	(698)	14,695	17,802
Income (loss) before income taxes	(35,855)	37,287	28,923
Provision for (benefit from) income taxes	(536)	13,884	12,972
Net Income (loss)	\$(35,319)	\$23,403	\$15,951

Geographic Information

Our foreign operations consist primarily of manufacturing facilities in Europe 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 2009, 2008 and 2007 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.

Sales to unaffiliated customers are as follows (in thousands):

	Fiscal		
SALES	2009 2008 2007		
United States	\$148,982	\$194,349	\$192,540
Foreign countries:			
Japan	79,709	128,056	131,471
Germany	72,732	106,642	92,872
Europe, other	48,575	62,623	81,028
Asia-Pacific, other	60,806	66,905	66,744
Rest of World	25,078	40,687	36,498
Total foreign countries sales	286,900	404,913	408,613
Total sales	\$435,882	\$599,262	\$601,153

Long-lived assets, which include all non-current assets other than goodwill, intangibles and deferred taxes, by geographic region, are as follows (in thousands):

	Fiscal Year-end	
LONG-LIVED ASSETS	2009	2008
United States	\$82,862	\$85,481
Foreign countries:		
Germany	28,486	33,691
Europe, other	9,599	10,750
Asia-Pacific	2,359	2,093
Total foreign countries long-lived assets	40,444	46,534
Total long-lived assets	\$123,306	\$132,015

For fiscal 2009, 2008 and 2007, no one customer accounted for 10% or more of total net sales.

19. SUBSEQUENT EVENTS

On October 14, 2009, we acquired all the assets and certain operating liabilities of StockerYale's laser module product line in Montreal and its specialty fiber product line in Salem, New Hampshire for approximately \$15.0 million in cash. StockerYale designs and manufactures light lasers, LED modules and specialty optical fibers.

On September 14, 2009, the United States District Court for the Northern District of California issued an order granting preliminary approval of the settlement of the three purported shareholder derivative lawsuits discussed in Note 12, Commitments and Contingencies. On November 20, 2009, the court held a hearing for final approval of the settlement, and on November 24, 2009, the court entered an Order and Final Judgment, which approved the settlement and dismissed the action with prejudice. Following the payment of the attorneys' fees and expenses, we received a net cash benefit of \$2.25 million from the settlement on December 11, 2009.

QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Summarized quarterly financial data for the years ended October 3, 2009 and September 27, 2008 are as follows (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2009:				
Net sales	\$124,388	\$105,422	\$98,479	\$107,593
Gross profit	50,389	39,607	33,614	37,500
Net loss	(14,679)(1)	(9,130)(2)	(7,015)(3)	(4,495)(4)
Net loss per basic share.	\$(0.61)	\$(0.38)	\$(0.29)	\$(0.18)
Net loss per diluted share	\$(0.61)	\$(0.38)	\$(0.29)	\$(0.18)
Fiscal 2008:				
Net sales	\$144,296	\$155,942	\$157,024	\$142,000
Gross profit	60,494	67,124	69,259	55,029
Net income	4,729(5)	6,125(6)	8,402(7)	4,147(8)
Net income per basic share	\$0.15	\$0.20	\$0.36	\$0.18
Net income per diluted share	\$0.15	\$0.19	\$0.35	\$0.17

- (1) The first quarter of fiscal 2009 includes a \$19,286 after tax charge for the impairment of all of the goodwill of our Commercial Lasers and Components segment, \$1,153 of after tax stock-related compensation expense, \$2,613 of after tax restructuring costs primarily related to the exit of our Auburn, California facility, the consolidation of our German Excimer manufacturing into one location in Germany and headcount reductions due to current economic conditions, and \$269 of after tax expense related to litigation resulting from our internal stock option investigation.
- (2) The second quarter of fiscal 2009 includes \$1,972 of after tax stock-related compensation expense, \$4,463 of after tax restructuring costs primarily related to the exit of our Auburn, California facility, the consolidation of our German Excimer manufacturing into one location in Germany and headcount reductions due to current economic conditions, \$356 of after tax expense related to litigation resulting from our internal stock option investigation and a tax charge of \$2,666 resulting from a recently enacted change in state tax law.
- (3) The third quarter of fiscal 2009 includes \$1,368 of after tax stock-related compensation expense, \$3,354 of after tax restructuring costs primarily related to the exit of our St. Louis, Missouri and Munich, Germany facilities and related headcount reductions, and \$74 of after tax expense related to litigation resulting from our internal stock option investigation.
- (4) The fourth quarter of fiscal 2009 includes \$1,308 of after tax stock-related compensation expense, \$1,054 of after tax restructuring costs primarily related to the exit of our St. Louis, Missouri facility and the planned fiscal 2010 closure of our Finland facility, \$1,111 of tax expense related to an increase in valuation allowances against deferred tax assets and \$121 of after tax expense related to litigation resulting from our internal stock option investigation.
- (5) The first quarter of fiscal 2008 includes \$1,933 of after tax stock-related compensation expense and \$2,849 of after tax expense related to litigation and our restatement of financial statements resulting from our internal stock option investigation.
- (6) The second quarter of fiscal 2008 includes \$3,734 of after tax stock-related compensation expense, \$1,528 of after tax expense related to litigation and our restatement of financial statements resulting from our internal stock option investigation and a tax charge of \$1,394 in connection with a dividend from one of our European subsidiaries.
- (7) The third quarter of fiscal 2008 includes \$2,031 of after tax stock-related compensation expense, \$1,374 of after tax restructuring costs primarily related to the exit of our Auburn, California facility and \$935 of after tax expense related to litigation resulting from our internal stock option investigation.
- (8) The fourth quarter of fiscal 2008 includes \$1,308 of after tax stock-related compensation expense, \$2,566 of after tax restructuring costs primarily related to the exit of our Auburn, California facility, the consolidation of our German DPSS manufacturing into one location in Germany and headcount reductions due to the evolving global economic situation and \$184 of after tax expense related to litigation resulting from our internal stock option investigation.

DIRECTORS AND EXECUTIVE OFFICERS OF COHERENT, INC.

BOARD OF DIRECTORS

Garry W. Rogerson, Ph.D.

Chairman of the Board, Coherent, Inc. President and Chief Executive Officer Varian, Inc.

John R. Ambroseo, Ph.D.

President and Chief Executive Officer Coherent, Inc.

John H. Hart

Chief Technical Officer and Senior Vice President (retired) 3Com Corporation

EXECUTIVE OFFICERS

John R. Ambroseo, Ph.D.

President and Chief Executive Officer Coherent, Inc.

Helene Simonet

Executive Vice President and Chief Financial Officer Coherent, Inc.

Susan James

Partner and Executive Board Member (retired) Ernst & Young

L. William Krause

President LWK Ventures

Lawrence Tomlinson

Senior Vice President and Treasurer (retired) Hewlett-Packard Company

Luis Spinelli

Executive Vice President and Chief Technology Officer Coherent, Inc.

Bret DiMarco

Executive Vice President, General Counsel and Corporate Secretary Coherent, Inc.

Sandeep Vij

President and Chief Executive Officer MIPS Technologies, Inc.

Independent Registered Public Accounting Firm Deloitte & Touche, LLP

San Jose, CA

SEC Form 10-K and 10K/A

Form 10-K and 10K/A were filed with the Securities and Exchange Commission on December 15, 2009 and February 1, 2010 respectively for the 2009 fiscal year. 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 http://www.coherent.com

FINANCIAL INFORMATION

Coherent invites security analysts and representatives of portfolio management firms to contact:

Helene Simonet

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

59 Maiden Lane New York, NY 10038 www.amstock.com Telephone: (800) 937-5449 dansbro@amstock.com http://www.amstock.com $\textbf{Annual meeting} \ \text{of shareholders will held on April 1, 2010 at 1:00 p.m.}$

Stock Symbol
Common Stock traded under the symbol
COHR

Coherent, Inc. is an equal opportunity employer, M/F/H/V

SPECIAL NOTE REGARDING FORWARD-LOOKING DOCUMENTS: Except for historical statements, this annual report contains certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Actual results, events and performance may differ materially.Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. The Company undertakes no obligation to release publicly the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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.



www.Coherent.com

Coherent, Inc. 5100 Patrick Henry Drive Santa Clara, CA 95054